

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.

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Int 31H, AH=02H, AL=03H

Version

0.9

Brief

Set Processor Exception Handler Vector

Input

```
AX = 0203H
BL = exception/fault number (00H-1FH)
CX:(E)DX = selector:offset of exception handler
```

Return

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

```
if function unsuccessful
Carry flag = set
AX = error code
8021H   invalid value (BL not in range 0-1FH)
8022H   invalid selector
```

Notes

Sets the address of a handler for a CPU exception or fault, allowing a protected mode application to intercept processor exceptions (such as segment not present faults) that are not handled by the DPMI host and would otherwise generate a fatal error. This function should be avoided by DPMI 1.0 clients.

The value passed in CX should be a valid protected mode code (executable) selector, not a real mode segment address.

32-bit clients must supply a 32-bit offset in the EDX register. If the client's handler chains to the next exception handler, it must do so using a 32-bit interrupt stack frame.

Every exception is first examined by the DPMI host. If the host does not handle the exception, it reflects the exception to the first handler in the protected mode exception handler chain. See that page for a complete discussion of the environment and responsibilities of protected mode exception handlers installed with this function.

Clients which run under DPMI 1.0 should use Int 31H Functions 0212H and 0213H to set the addresses of exception handlers. This function is supported by DPMI 1.0 hosts solely for compatibility with DPMI 0.9.

Refer to the rules for descriptor usage in Appendix D.

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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