



Note: This API call is for DOS and Win16 personality only. Use [Family API](#) for portability.

2018/09/07 05:04 · prokushev · [0 Comments](#)

Int 21H, AH=59H

Version

3 and higher

Brief

GET EXTENDED ERROR INFORMATION

Family API

[DosErrClass](#)

Input

- AH = 59h
- BX = 0000h

Return

- AX = extended error code (see #01680)
- BH = error class (see #01682)
- BL = recommended action (see #01683)
- CH = error locus (see #01684)
- ES:DI may be pointer (see #01681, #01680)
- CL, DX, SI, BP, and DS destroyed

Notes

functions available under DOS 2.x map the true DOS 3.0+ error code into one supported under DOS 2.x

you should call this function to retrieve the true error code when an FCB or DOS 2.x call returns an error

under DR DOS 5.0, this function does not use any of the DOS-internal stacks and may thus be called at any time

Values for DOS extended error code:

—DOS 2.0+ —	
00h (0)	no error
01h (1)	function number invalid
02h (2)	file not found
03h (3)	path not found
04h (4)	too many open files (no handles available)
05h (5)	access denied
06h (6)	invalid handle
07h (7)	memory control block destroyed
08h (8)	insufficient memory
09h (9)	memory block address invalid
0Ah (10)	environment invalid (usually >32K in length)
0Bh (11)	format invalid
0Ch (12)	access code invalid
0Dh (13)	data invalid
0Eh (14)	reserved
0Eh (14)	(PTS-DOS 6.51+, S/DOS 1.0+) fixup overflow
0Fh (15)	invalid drive
10h (16)	attempted to remove current directory
11h (17)	not same device
12h (18)	no more files
—DOS 3.0+ (INT 24 errors)—	
13h (19)	disk write-protected
14h (20)	unknown unit
15h (21)	drive not ready
16h (22)	unknown command
17h (23)	data error (CRC)
18h (24)	bad request structure length
19h (25)	seek error
1Ah (26)	unknown media type (non-DOS disk)
1Bh (27)	sector not found
1Ch (28)	printer out of paper
1Dh (29)	write fault
1Eh (30)	read fault
1Fh (31)	general failure
20h (32)	sharing violation
21h (33)	lock violation
22h (34)	disk change invalid (ES:DI → media ID structure)(see #01681)
23h (35)	FCB unavailable

23h (35)	(PTS-DOS 6.51+, S/DOS 1.0+) bad FAT
24h (36)	sharing buffer overflow
25h (37)	(DOS 4.0+) code page mismatch
26h (38)	(DOS 4.0+) cannot complete file operation (EOF / out of input)
27h (39)	(DOS 4.0+) insufficient disk space
28h-31h	reserved
—OEM network errors (INT 24)—	
32h (50)	network request not supported
33h (51)	remote computer not listening
34h (52)	duplicate name on network
35h (53)	network name not found
36h (54)	network busy
37h (55)	network device no longer exists
38h (56)	network BIOS command limit exceeded
39h (57)	network adapter hardware error
3Ah (58)	incorrect response from network
3Bh (59)	unexpected network error
3Ch (60)	incompatible remote adapter
3Dh (61)	print queue full
3Eh (62)	queue not full
3Fh (63)	not enough space to print file
40h (64)	network name was deleted
41h (65)	network: Access denied (DOS 3.0+ [maybe 3.3+???) codepage switching not possible (see also INT 21/AX=6602h,INT 2F/AX=AD42h)
42h (66)	network device type incorrect
43h (67)	network name not found
44h (68)	network name limit exceeded
45h (69)	network BIOS session limit exceeded
46h (70)	temporarily paused
47h (71)	network request not accepted
48h (72)	network print/disk redirection paused
49h (73)	network software not installed (LANtastic) invalid network version
4Ah (74)	unexpected adapter close (LANtastic) account expired
4Bh (75)	(LANtastic) password expired
4Ch (76)	(LANtastic) login attempt invalid at this time
4Dh (77)	(LANtastic v3+) disk limit exceeded on network node
4Eh (78)	(LANtastic v3+) not logged in to network node
4Fh (79)	reserved
—end of errors reportable via INT 24—	
50h (80)	file exists
51h (81)	(undoc) duplicated FCB
52h (82)	cannot make directory
53h (83)	fail on INT 24h
—network-related errors (non-INT 24)—	
54h (84)	(DOS 3.3+) too many redirections / out of structures
55h (85)	(DOS 3.3+) duplicate redirection / already assigned

56h (86)	(DOS 3.3+) invalid password
57h (87)	(DOS 3.3+) invalid parameter
58h (88)	(DOS 3.3+) network write fault
59h (89)	(DOS 4.0+) function not supported on network / no process slots available
5Ah (90)	(DOS 4.0+) required system component not installed / not frozen
5Bh (91)	(DOS 4.0+,NetWare4) timer server table overflowed
5Ch (92)	(DOS 4.0+,NetWare4) duplicate in timer service table
5Dh (93)	(DOS 4.0+,NetWare4) no items to work on
5Fh (95)	(DOS 4.0+,NetWare4) interrupted / invalid system call
64h (100)	(MSCDEX) unknown error
64h (100)	(DOS 4.0+,NetWare4) open semaphore limit exceeded
65h (101)	(MSCDEX) not ready
65h (101)	(DOS 4.0+,NetWare4) exclusive semaphore is already owned
66h (102)	(MSCDEX) EMS memory no longer valid
66h (102)	(DOS 4.0+,NetWare4) semaphore was set when close attempted
67h (103)	(MSCDEX) not High Sierra or ISO-9660 format
67h (103)	(DOS 4.0+,NetWare4) too many exclusive semaphore requests
68h (104)	(MSCDEX) door open
68h (104)	(DOS 4.0+,NetWare4) operation invalid from interrupt handler
69h (105)	(DOS 4.0+,NetWare4) semaphore owner died
6Ah (106)	(DOS 4.0+,NetWare4) semaphore limit exceeded
6Bh (107)	(DOS 4.0+,NetWare4) insert drive B: disk into A: / disk changed
6Ch (108)	(DOS 4.0+,NetWare4) drive locked by another process
6Dh (109)	(DOS 4.0+,NetWare4) broken pipe
6Eh (110)	(DOS 5.0+,NetWare4) pipe open/create failed
6Fh (111)	(DOS 5.0+,NetWare4) pipe buffer overflowed
70h (112)	(DOS 5.0+,NetWare4) disk full
71h (113)	(DOS 5.0+,NetWare4) no more search handles
72h (114)	(DOS 5.0+,NetWare4) invalid target handle for dup2
73h (115)	(DOS 5.0+,NetWare4) bad user virtual address / protection violation
74h (116)	(DOS 5.0+) VIOKBD request
74h (116)	(NetWare4) error on console I/O
75h (117)	(DOS 5.0+,NetWare4) unknown category code for IOCTL
76h (118)	(DOS 5.0+,NetWare4) invalid value for verify flag
77h (119)	(DOS 5.0+,NetWare4) level four driver not found by DOS IOCTL
78h (120)	(DOS 5.0+,NetWare4) invalid / unimplemented function number
79h (121)	(DOS 5.0+,NetWare4) semaphore timeout
7Ah (122)	(DOS 5.0+,NetWare4) buffer too small to hold return data
7Bh (123)	(DOS 5.0+,NetWare4) invalid character or bad file-system name
7Ch (124)	(DOS 5.0+,NetWare4) unimplemented information level
7Dh (125)	(DOS 5.0+,NetWare4) no volume label found
7Eh (126)	(DOS 5.0+,NetWare4) module handle not found
7Fh (127)	(DOS 5.0+,NetWare4) procedure address not found
80h (128)	(DOS 5.0+,NetWare4) CWait found no children
81h (129)	(DOS 5.0+,NetWare4) CWait children still running
82h (130)	(DOS 5.0+,NetWare4) invalid operation for direct disk-access handle

83h (131)	(DOS 5.0+,NetWare4) attempted seek to negative offset
84h (132)	(DOS 5.0+,NetWare4) attempted to seek on device or pipe
—JOIN/SUBST errors—	
85h (133)	(DOS 5.0+,NetWare4) drive already has JOINed drives
86h (134)	(DOS 5.0+,NetWare4) drive is already JOINed
87h (135)	(DOS 5.0+,NetWare4) drive is already SUBSTed
88h (136)	(DOS 5.0+,NetWare4) can not delete drive which is not JOINed
89h (137)	(DOS 5.0+,NetWare4) can not delete drive which is not SUBSTed
8Ah (138)	(DOS 5.0+,NetWare4) can not JOIN to a JOINed drive
8Bh (139)	(DOS 5.0+,NetWare4) can not SUBST to a SUBSTed drive
8Ch (140)	(DOS 5.0+,NetWare4) can not JOIN to a SUBSTed drive
8Dh (141)	(DOS 5.0+,NetWare4) can not SUBST to a JOINed drive
8Eh (142)	(DOS 5.0+,NetWare4) drive is busy
8Fh (143)	(DOS 5.0+,NetWare4) can not JOIN/SUBST to same drive
90h (144)	(DOS 5.0+,NetWare4) directory must not be root directory
91h (145)	(DOS 5.0+,NetWare4) can only JOIN to empty directory
92h (146)	(DOS 5.0+,NetWare4) path is already in use for SUBST
93h (147)	(DOS 5.0+,NetWare4) path is already in use for JOIN
94h (148)	(DOS 5.0+,NetWare4) path is in use by another process
95h (149)	(DOS 5.0+,NetWare4) directory previously SUBSTituted
96h (150)	(DOS 5.0+,NetWare4) system trace error
97h (151)	(DOS 5.0+,NetWare4) invalid event count for DosMuxSemWait
98h (152)	(DOS 5.0+,NetWare4) too many waiting on mutex
99h (153)	(DOS 5.0+,NetWare4) invalid list format
9Ah (154)	(DOS 5.0+,NetWare4) volume label too large
9Bh (155)	(DOS 5.0+,NetWare4) unable to create another TCB
9Ch (156)	(DOS 5.0+,NetWare4) signal refused
9Dh (157)	(DOS 5.0+,NetWare4) segment discarded
9Eh (158)	(DOS 5.0+,NetWare4) segment not locked
9Fh (159)	(DOS 5.0+,NetWare4) invalid thread-ID address

A0h (160)	(DOS 5.0+) bad arguments
A0h (160)	(NetWare4) bad environment pointer
A1h (161)	(DOS 5.0+,NetWare4) invalid pathname passed to EXEC
A2h (162)	(DOS 5.0+,NetWare4) signal already pending
A3h (163)	(DOS 5.0+) uncertain media
A3h (163)	(NetWare4) ERROR_124 mapping
A4h (164)	(DOS 5.0+) maximum number of threads reached
A4h (164)	(NetWare4) no more process slots
A5h (165)	(NetWare4) ERROR_124 mapping
B0h (176)	(MS-DOS 7.0) volume is not locked
B1h (177)	(MS-DOS 7.0) volume is locked in drive
B2h (178)	(MS-DOS 7.0) volume is not removable
B4h (180)	(MS-DOS 7.0) lock count has been exceeded
B4h (180)	(NetWare4) invalid segment number
B5h (181)	(MS-DOS 7.0) a valid eject request failed

B5h (181)	(DOS 5.0-6.0,NetWare4) invalid call gate
B6h (182)	(DOS 5.0+,NetWare4) invalid ordinal
B7h (183)	(DOS 5.0+,NetWare4) shared segment already exists
B8h (184)	(DOS 5.0+,NetWare4) no child process to wait for
B9h (185)	(DOS 5.0+,NetWare4) NoWait specified and child still running
BAh (186)	(DOS 5.0+,NetWare4) invalid flag number
BBh (187)	(DOS 5.0+,NetWare4) semaphore does not exist
BCh (188)	(DOS 5.0+,NetWare4) invalid starting code segment
BDh (189)	(DOS 5.0+,NetWare4) invalid stack segment
BEh (190)	(DOS 5.0+,NetWare4) invalid module type (DLL can not be used as application)
BFh (191)	(DOS 5.0+,NetWare4) invalid EXE signature
C0h (192)	(DOS 5.0+,NetWare4) EXE marked invalid
C1h (193)	(DOS 5.0+,NetWare4) bad EXE format (e.g. DOS-mode program)
C2h (194)	(DOS 5.0+,NetWare4) iterated data exceeds 64K
C3h (195)	(DOS 5.0+,NetWare4) invalid minimum allocation size
C4h (196)	(DOS 5.0+,NetWare4) dynamic link from invalid Ring
C5h (197)	(DOS 5.0+,NetWare4) IOPL not enabled
C6h (198)	(DOS 5.0+,NetWare4) invalid segment descriptor privilege level
C7h (199)	(DOS 5.0+,NetWare4) automatic data segment exceeds 64K
C8h (200)	(DOS 5.0+,NetWare4) Ring2 segment must be moveable
C9h (201)	(DOS 5.0+,NetWare4) relocation chain exceeds segment limit
CAh (202)	(DOS 5.0+,NetWare4) infinite loop in relocation chain
CBh (203)	(NetWare4) environment variable not found
CCh (204)	(NetWare4) not current country
CDh (205)	(NetWare4) no signal sent
CEh (206)	(NetWare4) file name not 8.3
CFh (207)	(NetWare4) Ring2 stack in use
D0h (208)	(NetWare4) meta expansion is too long
D1h (209)	(NetWare4) invalid signal number
D2h (210)	(NetWare4) inactive thread
D3h (211)	(NetWare4) file system information not available
D4h (212)	(NetWare4) locked error
D5h (213)	(NetWare4) attempted to execute non-family API call in DOS mode
D6h (214)	(NetWare4) too many modules
D7h (215)	(NetWare4) nesting not allowed
E6h (230)	(NetWare4) non-existent pipe, or bad operation
E7h (231)	(NetWare4) pipe is busy
E8h (232)	(NetWare4) no data available for nonblocking read
E9h (233)	(NetWare4) pipe disconnected by server
EAh (234)	(NetWare4) more data available
FFh (255)	(NetWare4) invalid drive

Note: there is a report that some Microsoft documentation shifts all DOS

error codes in the range BCh (188) through CAh (202) up by one compared to what is listed here; that is probably a documentation

error

SeeAlso: #01682,#01683,#01684,#01961

Format of media ID structure:

Offset	Size	Description
00h	12 BYTES	ASCIZ volume label of required disk
0Ch	DWORD	serial number (DOS 4.0+)

SeeAlso: #01680

Values for DOS Error Class:

01h (1)	out of resource (storage space or I/O channels)
02h (2)	temporary situation (file or record lock)
03h (3)	authorization / permission problem (denied access)
04h (4)	internal system error (system software bug)
05h (5)	hardware failure
06h (6)	system failure (configuration file missing or incorrect)
07h (7)	application program error
08h (8)	not found
09h (9)	bad format
0Ah (10)	locked
0Bh (11)	media error
0Ch (12)	already exists / collision with existing item
0Dh (13)	unknown / other
0Eh (14)	(undoc) cannot
0Fh (15)	(undoc) time

SeeAlso: #01680,#01683,#01684

(Table 01683) Values for DOS Suggested Action:

01h	retry
02h	delayed retry (after pause)
03h	prompt user to reenter input
04h	abort after cleanup
05h	immediate abort ("panic")
06h	ignore
07h	retry after user intervention

SeeAlso: #01680,#01682,#01684

Values for DOS Error Locus:

01h	unknown or not appropriate
02h	block device (disk error)
03h	network related

04h	serial device (timeout)
04h	(PTS-DOS 6.51+ & S/DOS 1.0+) character device
05h	memory related

See also

AH=[59h](#)/BX=0001h,AX=en:docs:dos:api:int21:5d:0a[5D0Ah]],INT 2F/AX=122Dh,INT 24

Note

Text based on [Ralf Brown Interrupt List Release 61](#)

DOS API	
Process manager	INT 20H, INT 21H : 00H, 25H, 26H, 31H, 34H, 35H, 4BH, 4CH, 4DH, 50H, 51H, 52H, 55H, 62H, INT 22H, INT 27H, INT 28H
File manager	INT 25H, INT 26H, INT 21H : 0DH, 0EH, 0FH, 10H, 11H, 12H, 13H, 14H, 15H, 16H, 17H, 19H, 1AH, 1BH, 1CH, 21H, 22H, 23H, 24H, 27H, 28H, 29H, 2EH, 2FH, 32H, 3305H, 36H, 39H, 3AH, 3BH, 3CH, 3DH, 3EH, 3FH, 40H, 41H, 42H, 4300H, 4301H, 45H, 45H, 46H, 4EH, 4FH, 54H, 56H, 5700H, 5701H, 5AH, 5BH, 5c00H, 5c01H, 60H, 67H, 68H, 6900H, 6901H, 6AH, 6CH
Character Device I/O	INT 29H, INT 21H : 01H, 02H, 03H, 04H, 05H, 06H, 07H, 08H, 09H, 0AH, 0BH, 0AH, 0CH, 5D07H, 5D08H, 5D09H, 5D0AH
Signals	INT 23H, INT 24H, INT 21H : 3300H, 3301H, 3302H
Memory manager	INT 21H : 48H, 49H, 4AH, 5800H, 5801H, 5802H, 5803H
Date and Time	INT 21H : 2AH, 2BH, 2CH, 2DH
Misc	INT 21H : 30H, 3306H, 3700H, 3701H, 3702H, 3703H, 59H
NLS	INT 21H : 3303H, 3304H, 3800H, 3801H, 6300H, 6301H, 6301H, 6500H, 6501H, 6502H, 6503H, 6504H, 6505H, 6506H, 6507H, 6520H, 6521H, 6522H, 6523H, 65A0H, 65A1H, 65A2H, 6601H, 6602H
Devices	INT 21H : 4400H, 4401H, 4402H, 4403H, 4404H, 4405H, 4406H, 4407H, 4408H, 4409H, 440AH, 440BH, 440CH, 440DH, 440EH, 440FH, 4410H, 4411H, 53H
Network	INT 21H : 5E00H, 5E01H, 5E02H, 5E03H, 5E04H, 5E05H, 5F00H, 5F01H, 5F02H, 5F03H, 5F04H, 5F05H, 5F07H, 5F08H
osFree Macro Library	
Video I/O	@SetMode @SetCurSz @SetCurPos @GetCur @SetPage @ScrollUp @ScrollDn @Scroll @GetChAtr @PutChAtr @PutCh @SetPalet @SetColor @SetDot @GetDot @WrtTTY @VideoState @GetMode @GetDisplay @GetVideoState @GetEGAInfo @CIs
Hardware info	@Equipment @MemSize
Serial I/O	@AuxInit @AuxSendChar @AuxRecieveChar @AuxStatus
Tape I/O	@TapeOn @TapeOff @TapeRead @TapeWrite
Keyboard I/O	@KbdStatus @CharIn @CharPeek
Printer I/O	@PrnPrint @PrnInit @PrnStatus
Disk I/O	@DskReset @DskStatus @DskRead @DskWrite @DskVerify @DskFormat
Date and Time	@SetTime @GetTime

osFree Macro Library	
Mouse	@MouInit @MouShowPointer @MouStatus @MouSetPos @MouSetMickey @MouRegion
Memory manager	@ModBlok SET_BLOCK

2022/10/04 14:28 · prokushev · 0 Comments

2018/09/04 17:23 · prokushev · 0 Comments

Family API		
DOS	Process Manager	DosBeep DosExit DosSleep DosExecPgm
	File Manager	DosChDir DosChgFilePtr DosClose DosDelete DosDupHandle DosMkDir DosMove DosQCurDir DosQCurDisk DosSetFileMode DosOpen DosQFileInfo DosRead DosQFileMode DosQFSInfo DosQVerify DosRmdir DosSelectDisk DosFindClose DosFindFirst DosFindNext DosSetFileInfo DosSetVerify DosWrite DosFileLocks DosSetFHandState DosNewSize DosBufReset DosQFHandState DosSetFSinfo DosShutdown
	Memory Manager	DosFreeSeg DosSubAlloc DosSubFree DosSubSet DosAllocHuge DosAllocSeg DosReallocHuge DosReallocSeg DosGetHugeShift DosCreateCSAlias
	NLS	DosCaseMap DosGetCtryInfo DosGetDBCSEv DosSetCtryCode DosGetCollate DosGetMessage DosInsMessage DosPutMessage
	Date and Time	DosSetDateTime DosGetDateTime
	Devices	DosDevConfig DosDevIOct1 DosDevIOct2
	Signals	DosHoldSignal DosSetSigHandler
	Misc	BadDynLink DosGetEnv DosGetMachineMode DosGetVersion DosError DosErrClass DosSetVec
KBD	KbdCharIn KbdFlushBuffer KbdGetStatus KbdSetStatus KbdStringIn KbdPeek	
VIO	VioGetBuf VioGetConfig VioGetCurPos VioGetCurType VioGetPhysBuf VioReadCellStr VioReadCharStr VioScrollUp VioScrollDn VioScrollLf VioScrollRt VioScrUnLock VioSetCurPos VioSetCurType VioSetMode VioGetMode VioShowBuf VioWrtCellStr VioWrtCharStr VioWrtCharStrAtt VioWrtNAttr VioWrtNCell VioWrtNChar VioWrtTTY VioScrLock VioPopUp	
Tools	BIND	
Modules	DOSCALLS.DLL VIOCALLS.DLL KBDSCALLS.DLL MSG.DLL	
Libraries	API.LIB OS2386.LIB FAPI.LIB DOSCALLS.LIB SUBCALLS.LIB	

2018/08/25 15:05 · prokushev · 0 Comments

From: <https://osfree.su/doku/> - **osFree wiki**

Permanent link: <https://osfree.su/doku/doku.php?id=en:docs:dos:api:int21:59>

Last update: **2025/07/13 12:56**

