

ADos

COLLABORATORS

	<i>TITLE :</i> ADos	
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>
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Chapter 1

ADos

1.1 AmigaTalk to AmigaDOS Help:

The AmigaTalk interface to the AmigaDOS functions has been divided up into four classifications:

- | | |
|----------------|---|
| SAFE | - Incorrect parameters will not cause major problems. |
| UNSAFE | - Ensure that parameters & methods that are marked UNSAFE are checked for correct return values. |
| DANGEROUS | - The Methods that use DANGEROUS AmigaDOS functions could cause loss of data or could freeze the Operating System! |
| VERY DANGEROUS | - The Methods that use VERY DANGEROUS AmigaDOS functions could cause a major loss of data (example: the Format function), or could lock up your PC! |

WARNING: Know what you're doing when using the AmigaTalk-to-AmigaDOS interface (If you destroy your HardDisk contents, you were warned)!

Each Method is first described by the AmigaDOS documentation for the underlying AmigaDOS function, then by the AmigaTalk Method description. Hopefully, this will force you to read what each function does to the Operating System of your Amiga first, before trying to do something potentially destructive to your Amiga-PC.

None of the Methods here will present a Requester re: your sanity (unless the underlying AmigaDOS function does so), so you will have no feedback about what your AmigaTalk program is doing, unless you create your own sub-classes that hold your hand better. My intent was to implement the functionality of AmigaDOS as closely as possible, so if you do not like something about these classes, either re-write AmigaDOS or create your own (more bullet-proof)

AmigaTalk classes!

There is also a Class called
DosFlags
that is useful with these
Classes.

Check them out:

SAFE	Methods
UNSAFE	Methods
DANGEROUS	Methods
VERY DANGEROUS	Methods
- Here be Dragons!!	

1.2 SAFE AmigaDOS Methods:

The functions listed here & used by AmigaTalk have been deemed the least harmful of the AmigaDOS functions. This is based on my judgement only, but here is how I arrived at this:
The functions determined to be safe are mainly for gathering information from AmigaDOS. Those that actually change things are easily corrected by the User (for example: If you use setComment: commentString onFile: fileName & you used the wrong commentString, you can always re-do the Method with the correct comment, or correct it using a file utility, such as DirOpus or DiskMaster II). Where it made sense to do so, the arguments the User supplies these functions/Methods are also checked for valid ranges or values, so even if you pass in a NULL pointer, AmigaTalk should short-circuit your attempt to kill your system (I hope!).

SAFE AmigaDOS Functions/AmigaTalk Methods:

waitForChar
vPrintf
vFPrintf
unGetC
strToInt
strToDate
splitName
setProtection
setPrompt
setIoErr
setFileDialog
setComment
sameLock
sameDevice
readLink
readItem
readArgs

```
readFile
putStr
printFault
pathPart
parentOfFH
parentDir
maxCli
matchNext
matchFirst
matchEnd
isInteractive
isFileSystem
ioErr
getVar
getPrompt
getProgramName
getProgramDir
getFileSysTask
getDeviceProc
getCurrentDirName
getConsoleTask
getArgStr
fPuts
fPutC
findVar
findCliProc
fGets
fGetC
fault
endNotify
delay
dateToStr
currentDir
compareDates
cliPointer
addBuffers
abortPacket
```

1.3 UNSAFE AmigaDOS Methods:

It's advisable that the User of these AmigaTalk Methods check their work before usage.

This classification is based on my judgement only, but here is how I arrived at this: The functions determined to be Unsafe can change file Locks, traverse a directory, or change something (such as an Assignment) that might not be easily found or corrected.

Where it made sense to do so, the arguments the User supplies these functions/Methods are also checked for valid ranges or values, so even if you pass in a NULL pointer, AmigaTalk should short-circuit your attempt to kill your system (I hope!).

UNSAFE AmigaDOS Functions/AmigaTalk Methods:

```
writeChars
vFWritef
unLockRecords
unLockRecord
unLockDosList
unLock
startNotify
setVar
setProgramName
setProgramDir
setOwner
setMode
setCurrentDirName
rename
relabel
parsePatternNoCase
parsePattern
output
openFromLock
openFile
nextDosEntry
nameFromLock
nameFromFH
matchPatternNoCase
matchPattern
makeLink
makeDosEntry
lockRecords
lockRecord
lockDosList
lock
input
infoDisk
fRead
flushFH
findSegment
findDosEntry
findArg
exNext
execute
examineFH
examine
exAllEnd
exAll
dupLockFromFH
dupLock
dateStamp
closeFile
checkSignal
changeMode
assignPath
assignLock
assignLate
assignAdd
addPart
```

1.4 DANGEROUS AmigaDOS Methods:

WARNING: Improper usage of these Methods will (at the bare minimum), result in the Operating System hanging up, which could result in loss of data. This is the least of what could happen! Turn back now!

DANGEROUS AmigaDOS Functions/AmigaTalk Methods:

```
writeFile
setVBuf
setSize
setArgStr
selectOutput
selectInput
seekFile
runCommand
replyPkt
inhibit
fWrite
freeDosObject
freeDosEntry
freeDeviceProc
freeArgs
exitProgram      -- Avoid like the plague!
deviceProc
deleteVar
createNewProc
cliInitRun
cliInitNewcli
attemptLockDosList
allocDosObject
addDosEntry
```

1.5 VERY DANGEROUS AmigaDOS Methods:

WARNING: Improper usage of these Methods will (at the bare minimum), result in the Operating System hanging up, which could result in loss of data. This is the least of what could happen! Turn back now!

VERY DANGEROUS AmigaDOS Functions/AmigaTalk Methods:

```
waitPkt
unLoadSeg
systemTagList
setFileSysTask
setConsoleTask
sendPkt
remSegment
remDosEntry
remAssignList
newLoadSeg
loadSeg
internalUnLoadSeg
internalLoadSeg
```

```
format           -- Are you out of your tree??
doPacket
deleteFile
addSegment
```

1.6 ADos Full Index:

SAFE AmigaDOS Functions/AmigaTalk Methods:

```
waitForChar
vPrintf
vFPrintf
unGetC
strToInt
strToDate
splitName
setProtection
setPrompt
setIoErr
setFileDate
setComment
sameLock
sameDevice
readLink
readItem
readArgs
readFile
putStr
printFault
pathPart
parentOfFH
parentDir
maxCli
matchNext
matchFirst
matchEnd
isInteractive
isFileSystem
ioErr
getVar
getPrompt
getProgramName
getProgramDir
getFileSysTask
getDeviceProc
getCurrentDirName
getConsoleTask
getArgStr
fPutS
fPutC
findVar
findCliProc
filePart
fGets
fGetC
fault
```

```
endNotify  
delay  
dateToStr  
currentDir  
compareDates  
cliPointer  
addBuffers  
abortPacket
```

UNSAFE AmigaDOS Functions/AmigaTalk Methods:

```
writeChars  
vFWritef  
unLockRecords  
unLockRecord  
unLockDosList  
unLock  
startNotify  
setVar  
setProgramName  
setProgramDir  
setOwner  
setMode  
setCurrentDirName  
rename  
relabel  
parsePatternNoCase  
parsePattern  
output  
openFromLock  
openFile  
nextDosEntry  
nameFromLock  
nameFromFH  
matchPatternNoCase  
matchPattern  
makeLink  
makeDosEntry  
lockRecords  
lockRecord  
lockDosList  
lock  
input  
infoDisk  
fRead  
flushFH  
findSegment  
findDosEntry  
findArg  
exNext  
execute  
examineFH  
examine  
exAllEnd  
exAll  
dupLockFromFH  
dupLock
```

```
dateStamp  
closeFile  
checkSignal  
changeMode  
assignPath  
assignLock  
assignLate  
assignAdd  
addPart
```

DANGEROUS AmigaDOS Functions/AmigaTalk Methods:

```
writeFile  
setVBuf  
setFileSize  
setArgStr  
selectOutput  
selectInput  
seekFile  
runCommand  
replyPkt  
inhibit  
fWrite  
freeDosObject  
freeDosEntry  
freeDeviceProc  
freeArgs  
exitProgram      -- Avoid like the plague!  
deviceProc  
deleteVar  
createNewProc  
cliInitRun  
cliInitNewcli  
attemptLockDosList  
allocDosObject  
addDosEntry
```

VERY DANGEROUS AmigaDOS Functions/AmigaTalk Methods:

```
waitPkt  
unLoadSeg  
systemTagList  
setFileSysTask  
setConsoleTask  
sendPkt  
remSegment  
remDosEntry  
remAssignList  
newLoadSeg  
loadSeg  
internalUnLoadSeg  
internalLoadSeg  
format          -- Are you out of your tree??  
doPacket  
deleteFile  
addSegment
```

1.7 DosFlags Class:

This class is a Singleton Class that works like a Dictionary. You retrieve a value by supplying a key to the class method systemTag:

The methods the class recognizes are:

isSingleton

Since this Class is a Singleton, return true.

new

Create (if necessary) & initialize a new instance of the Class.

close " Remove, Kill, Destroy, Burn the Bridge, etc! "

Before exiting AmigaTalk be sure to send this message to dosFlags. (Better still, place dosFlags close in the UpdateCommands script file).

systemTag: aSymbol

Search for aSymbol in the dictionary & return it's associated value:

isNil

We have to override our parent Class methods, because we are not nil.

notNil

We have to override our parent Class methods, because we are not nil.

ifNil: aBlock

We have to override our parent Class methods, because we are not nil.

printString

Simply return our dictionary fileName.

Here's a list of the keys the Class knows about:

ABORT_BUSY	-- AmigaDOS Packets
ABORT_DISK_ERROR	
ACCESS_READ	
ACCESS_WRITE	
ACTION_ADD_NOTIFY	
ACTION_CHANGE_MODE	
ACTION_CHANGE_SIGNAL	
ACTION_COPY_DIR	
ACTION_COPY_DIR_FH	
ACTION_CREATE_DIR	
ACTION_CURRENT_VOLUME	

ACTION_DELETE_OBJECT
ACTION_DIE
ACTION_DISK_CHANGE
ACTION_DISK_INFO
ACTION_DISK_TYPE
ACTION_END
ACTION_EVENT
ACTION_EXAMINE_ALL
ACTION_EXAMINE_ALL_END
ACTION_EXAMINE_FH
ACTION_EXAMINE_NEXT
ACTION_EXAMINE_OBJECT
ACTION_FH_FROM_LOCK
ACTION_FINDINPUT
ACTION_FINDOUTPUT
ACTION_FINDUPDATE
ACTION_FLUSH
ACTION_FORMAT
ACTION_FREE_LOCK
ACTION_FREE_RECORD
ACTION_GET_BLOCK
ACTION_INFO
ACTION_INHIBIT
ACTION_IS_FILESYSTEM
ACTION_LOCATE_OBJECT
ACTION_LOCK_RECORD
ACTION_MAKE_LINK
ACTION_MORE_CACHE
ACTION NIL
ACTION_PARENT
ACTION_PARENT_FH
ACTION_READ
ACTION_READ_LINK
ACTION_READ_RETURN
ACTION_REMOVE_NOTIFY
ACTION_RENAME_DISK
ACTION_RENAME_OBJECT
ACTION_SAME_LOCK
ACTION_SCREEN_MODE
ACTION_SEEK
ACTION_SERIALIZE_DISK
ACTION_SET_COMMENT
ACTION_SET_DATE
ACTION_SET_FILE_SIZE
ACTION_SET_MAP
ACTION_SET_OWNER
ACTION_SET_PROTECT
ACTION_STARTUP
ACTION_TIMER
ACTION_WAIT_CHAR
ACTION_WRITE
ACTION_WRITE_PROTECT
ACTION_WRITE_RETURN

ADO_CommFileLen
ADO_CommNameLen
ADO_DirLen

```
ADO_FH_Mode
ADO_PromptLen
APF_DIDDIR
APF_DODIR
APF_DODOT
APF_DOWILD
APF_DirChanged
APF_FollowHLinks
APF_ITSWILD
APF_NOMEMERR
BUF_FULL
BUF_LINE
BUF_NONE
CHANGE_FH
CHANGE_LOCK
CMD_DISABLED
CMD_INTERNAL
CMD_SYSTEM
COMPLEX_BIT
DDF_AllBit
DDF_Completed
DDF_ExaminedBit
DDF_PatternBit
DDF_Single

DE_BAUD
DE_BLKSPERTRACK
DE_BOOTBLOCKS
DE_BOOTPRI
DE_BUFSIZE
DE_CONTROL
DE_DOSTYPE
DE_INTERLEAVE
DE_LOWCYL
DE_MASK
DE_MAXTRANSFER
DE_NUMBUFFERS
DE_NUMHEADS
DE_PREFAC
DE_RESERVEDBLKS
DE_SECORG
DE_SECPERBLK
DE_SIZEBLOCK
DE_TABLESIZE
DE_UPPERCYL

DLT_DEVICE
DLT_DIRECTORY
DLT_LATE
DLT_NONBINDING
DLT_PRIVATE
DLT_VOLUME
DOSFALSE
DOSTRU
DOS_CLI
DOS_EXALLCONTROL
DOS_FIB
```

```
DOS_FILEHANDLE
DOS_RDARGS
DOS_STDPKT
DTF_FUTURE
DTF_SUBST
DVPF_ASSIGN
DVPF_UNLOCK
ED_COMMENT
ED_DATE
ED_NAME
ED_OWNER
ED_PROTECTION
ED_SIZE
ED_TYPE
ENDSTREAMCH

ERROR_ACTION_NOT_KNOWN           -- AmigaDOS Error numbers
ERROR_BAD_HUNK
ERROR_BAD_NUMBER
ERROR_BAD_STREAM_NAME
ERROR_BAD_TEMPLATE
ERROR_BREAK
ERROR_BUFFER_OVERFLOW
ERROR_COMMENT_TOO_BIG
ERROR_DELETE_PROTECTED
ERROR_DEVICE_NOT_MOUNTED
ERROR_DIRECTORY_NOT_EMPTY
ERROR_DIR_NOT_FOUND
ERROR_DISK_FULL
ERROR_DISK_NOT_VALIDATED
ERROR_DISK_WRITE_PROTECTED
ERROR_FILE_NOT_OBJECT
ERROR_INVALID_COMPONENT_NAME
ERROR_INVALID_LOCK
ERROR_INVALID_RESIDENT_LIBRARY
ERROR_IS_SOFT_LINK
ERROR_KEY_NEEDS_ARG
ERROR_LINE_TOO_LONG
ERROR_LOCK_COLLISION
ERROR_LOCK_TIMEOUT
ERROR_NOT_A_DOS_DISK
ERROR_NOT_EXECUTABLE
ERROR_NOT_IMPLEMENTED
ERROR_NO_DEFAULT_DIR
ERROR_NO_DISK
ERROR_NO_FREE_STORE
ERROR_NO_MORE_ENTRIES
ERROR_OBJECT_EXISTS
ERROR_OBJECT_IN_USE
ERROR_OBJECT_LINKED
ERROR_OBJECT_NOT_FOUND
ERROR_OBJECT_TOO_LARGE
ERROR_OBJECT_WRONG_TYPE
ERROR_READ_PROTECTED
ERROR_RECORD_NOT_LOCKED
ERROR_RENAME_ACROSS_DEVICES
ERROR_REQUIRED_ARG_MISSING
```

```
ERROR_SEEK_ERROR
ERROR_TASK_TABLE_FULL
ERROR_TOO_MANY_ARGS
ERROR_TOO_MANY_LEVELS
ERROR_UNLOCK_ERROR
ERROR_UNMATCHED_QUOTES
ERROR_WRITE_PROTECTED

EXAMINE_BIT
EXCLUSIVE_LOCK

EXT_ABS
EXT_ABSCOMMON
EXT_ABSREF16
EXT_ABSREF32
EXT_ABSREF8
EXT_COMMON
EXT_DEF
EXT_DEXT16
EXT_DEXT32
EXT_DEXT8
EXT_REF16
EXT_REF32
EXT_REF8
EXT_RELCOMMON
EXT_RELREF16
EXT_RELREF32
EXT_RELREF8
EXT_RES
EXT_SYMB
FAULT_MAX

FIBF_ARCHIVE      -- File protection/attribute bits
FIBF_DELETE
FIBF_EXECUTE
FIBF_GRP_DELETE
FIBF_GRP_EXECUTE
FIBF_GRP_READ
FIBF_GRP_WRITE
FIBF_HIDDEN
FIBF_OTR_DELETE
FIBF_OTR_EXECUTE
FIBF_OTR_READ
FIBF_OTR_WRITE
FIBF_PURE
FIBF_READ
FIBF_SCRIPT
FIBF_WRITE

FORMAT_CDN -- Formats for expressing the Date.
FORMAT_DOS
FORMAT_INT
FORMAT_MAX
FORMAT_USA

GVF_BINARY_VAR
GVF_DONT_NULL_TERM
```

```
GVF_GLOBAL_ONLY
GVF_LOCAL_ONLY
GVF_SAVE_VAR

HUNKF ADVISED          -- File Hunk Types
HUNKF CHIP
HUNKF FAST
HUNK_ABSRELOC16
HUNK_ABSRELOC32
HUNK_BREAK
HUNK_BSS
HUNK_CODE
HUNK_DATA
HUNK_DEBUG
HUNK_DREL16
HUNK_DREL32
HUNK_DREL8
HUNK_END
HUNK_EXT
HUNK_HEADER
HUNK_INDEX
HUNK_LIB
HUNK_NAME
HUNK_OVERLAY
HUNK_RELOC16
HUNK_RELOC32
HUNK_RELOC32SHORT
HUNK_RELOC8
HUNK_RELRELOC16
HUNK_RELRELOC32
HUNK_RELRELOC8
HUNK_SYMBOL
HUNK_UNIT

ID_DOS_DISK
ID_FASTDIR_DOS_DISK
ID_FASTDIR_FFS_DISK
ID_FFS_DISK
ID_INTER_DOS_DISK
ID_INTER_FFS_DISK
ID_KICKSTART_DISK
ID_MS DOS_DISK
ID_NOT REALLY DOS
ID_NO_DISK_PRESENT
ID_UNREADABLE_DISK
ID_VALIDATED
ID_VALIDATING
ID_WRITE_PROTECTED

ITEM_EQUAL
ITEM_ERROR
ITEM NOTHING
ITEM_QUOTED
ITEM_UNQUOTED
LDF_ALL
LDF_ASSIGNS
LDF_DELETE
```

```
LDF_DEVICES
LDF_ENTRY
LDF_READ
LDF_VOLUMES
LDF_WRITE
LEN_DATSTRING
LINK_HARD
LINK_SOFT
LOCK_DIFFERENT
LOCK_SAME
LOCK_SAME_VOLUME
LVB_IGNORE
LVF_IGNORE
LV_ALIAS
LV_VAR
MAX_MULTIARGS
MAX_TEMPLATE_ITEMS
MODE_NEWFILE
MODE_OLDFILE
MODE_READWRITE
NOTIFY_CLASS
NOTIFY_CODE

NP_Arguments
NP_Cli
NP_CloseError
NP_CloseInput
NP_CloseOutput
NP_CommandName
NP_ConsoleTask
NP_CopyVars
NP_CurrentDir
NP_Entry
NP_Error
NP_ExitCode
NP_ExitData
NP_FreeSeglist
NP_HomeDir
NP_Input
NP_Name
NP_NotifyOnDeath
NP_Output
NP_Path
NP_Priority
NP_Seglist
NP_StackSize
NP_Synchronous
NP_WindowPtr

NRF_MAGIC
NRF_NOTIFY_INITIAL
NRF_SEND_MESSAGE
NRF_SEND_SIGNAL
NRF_WAIT_REPLY
NR_HANDLER_FLAGS
OFFSET_BEGINNING
OFFSET_CURRENT
```

```
OFFSET_END
PRF_CLOSEINPUT
PRF_CLOSEOUTPUT
PRF_FREEARGS
PRF_FREECLI
PRF_FREECURRDIR
PRF_FREESEGLIST
P_ANY
P_CLASS
P_NOT
P_NOTCLASS
P_NOTEEND
P_OREND
P_ORNEXT
P_ORSTART
P_REPBEG
P_REPEND
P_SINGLE
P_STOP
RDAF_NOALLOC
RDAF_NOPROMPT
RDAF_STDIN
REC_EXCLUSIVE
REC_EXCLUSIVE_IMMED
REC_SHARED
REC_SHARED_IMMED
REPORT_INSERT
REPORT_LOCK
REPORT_STREAM
REPORT_TASK
REPORT_VOLUME
RETURN_ERROR
RETURN_FAIL
RETURN_OK
RETURN_WARN
RNF_WILDSTAR
RUN_EXECUTE
RUN_SYSTEM
RUN_SYSTEM_ASYNCNCH
SHARED_LOCK
SIGBREAKF_CTRL_C
SIGBREAKF_CTRL_D
SIGBREAKF_CTRL_E
SIGBREAKF_CTRL_F
ST_FILE
ST_LINKDIR
ST_LINKFILE
ST_PIPEFILE
ST_ROOT
ST_SOFTLINK
ST_USERDIR
SYS_Asynch
SYS_CustomShell
SYS_Input
SYS_Output
SYS_UserShell
TICKS_PER_SECOND
```

See Also,

[UndefinedObject](#)