The following is a list of error codes and their descriptions.   Note that, in appropriate cases, additional information follows the error.   For example, if error code 2006 occurred on node 2 of the Catalog Tree, MacMedic™ would display this error as "(2006, 2)".

Error Code	Description
1000	The current VIB appears to be invalid, but an valid alternate VIB was found. You should replace your current VIB with this alternate.
1001	The current VIB has an incorrect signature. Every VIB starts with a signature. For HFS, this signature should be 'BD'. For HFS+, it should be 'H+'.
1002	The volume name stored in the VIB appears to be incorrect.
1003	The allocation block size, as stored in the VIB, is incorrect. (See Glossary for an explanation of allocation blocks).
1004	The clump size is incorrect, as it is stored in the VIB. (See Glossary for an explanation of the clump size).
1005	The allocation block start is incorrect. The allocation block start is where the allocation blocks begin.
1006	The Catalog Tree offsets and/or sizes, as stored in the VIB, are incorrect. (See Glossary for an explanation of the Catalog Tree.)
1007	The Extents Tree offsets and/or sizes, as stored in the VIB, are incorrect. (See Glossary for an explanation of the Extents Tree.)
1008	The clump size for the Catalog Tree is recorded incorrectly in the VIB.
1009	The total size of the Catalog Tree is recorded incorrectly in the VIB.
100A	The clump size for the Extents Tree is recorded incorrectly in the VIB.
100B	The clump size for the Catalog Tree is recorded incorrectly in the VIB.
100C	The Volume BitMap start is incorrectly recorded in the VIB.

100D	The volume name stored in the VIB does not match the name of the root folder in the Catalog Tree. In other words, although a valid name is found in the VIB, it most likely is not the actual name of the volume.
100E	An Extents Tree fragment does not evenly align on an allocation block boundary. In other words, it starts in the middle of an allocation block. All trees must start at beginning of an allocation block.
100F	A Catalog Tree fragment does not evenly align on an allocation block boundary. In other words, it starts in the middle of an allocation block. All trees must start at beginning of an allocation block.
1010	The actual number of files stored on the root folder does not match what is recorded in VIB.
1011	The actual number of folders stored on the root folder does not match what is recorded in VIB.
1012	The actual number of files stored in the drive does not match what is recorded in VIB.
1013	The actual number of folders stored on the drive does not match what is recorded in VIB.
1014	The total number of allocation blocks, as written in the VIB, is incorrect.
1015	The default clump size for data forks, as recorded in the VIB is incorrect. This is a verification written for HFS+. Because HFS+ has a separate clump size for

resource forks, a single check for a clump

size is not enough (thus rendering error

code #1004 obsolete for HFS+, but not

HFS).

1016   The default clump size for resource forks,

as recorded in the VIB is incorrect.   This

is a verification written for HFS+.

Because HFS+ has a separate clump size for

resource forks, a single check for a clump

size is not enough (thus rendering error

code #1004 obsolete for HFS+, but not

HFS).

1017	The number of free allocation blocks, as recorded in the VIB, is incorrect.
1018	The next Catalog Node IDentifier (CNID) is incorrect. This value stores the CNID of the last record to be added to the Catalog Tree. If this value is incorrect, the next record to be added to the Catalog Tree may write over another

record, or greatly confuse the Catalog

Tree.

1020	The alternate VIB appears to be invalid. This alternate VIB is a backup of the current VIB of the drive. It used by the system and repair utilities as a reference if the current VIB appears to be invalid

or incorrect.   It is very important that

this alternate VIB exists.   If it does

not, the chances of repairing and

recovering a drive diminishes.

2002	Catalog Tree: The forward link of one node does not agree with the backward link of another node.
2005	The Catalog Tree bitmap does not appear to

be consistant with the actual state of the
Catalog Tree.

2006	A Catalog Tree node has an incorrect depth recorded.
2007	A Catalog Tree offset pointer has an incorrect or invalid downward link. Using offset pointers is a part of the Catalog Tree's method of bookkeeping.
2008	The number of leaf records, as stored in the Catalog Tree Header, is incorrect.
2009	The number of free nodes, as stored in the Catalog Tree Header, is incorrect.
200B	No root node for the Catalog Tree could be found.
200C	A Catalog Tree node has the wrong type listed.
200D	A Catalog Tree node has the wrong number recorded for the total number of records

it holds.

200E	A Catalog Tree node contains an invalid record.
2010	A Catalog Tree record was found in the wrong location in the Catalog Tree. All records in the Catalog Tree have a specific order to them, and this record appears to violate this order.
2011	One of the bottom offsets in the Catalog

Tree node appear to be incorrect.   These

offsets tell the node where each record

begins and ends.

| 2012 | Two records in the Catalog Tree share the same identifier. Each record has an unique identifier to the system (also sometimes referred to as a Catalog Node IDentifier (CNID)). If two contain the same value, the system cannot accurately distinguish between the two records. |

| 2020 | There are not enough map nodes to suit the Catalog Tree. Map nodes indicate what nodes are in use, and what nodes are not. These maps nodes create the Catalog Tree's bitmap. There must be enough map nodes so that every node in the Catalog Tree can be accounted for. |

| 2100 | There was no root folder found in the Catalog Tree. This root folder is where all the data is stored on the disk. If there is no root folder, the disk cannot be mounted. |

| 2200 | There are references to folders in the Catalog Tree that do not exist. For example, File A may claim to be inside a folder with the identifier #20, but there is no folder with the identifier #20. Thus, File A will not appear on the disk. |

| 2201 | The Catalog Tree is missing folder and/or thread records. Every folder is complemented with a thread record, and one or more of these complements are missing. On most systems, if the thread is missing, this will result in a folder that cannot be opened. If the folder is missing, it will not appear on the disk, and its contents will not be accessible. |

| 2202 | Records were found "outside" of the Catalog Tree. That is, valid nodes were located within the entire Catalog Tree range, but these nodes could not be linked into the Catalog Tree. These |

valid nodes also contained valid records.
If the drive has had major repair, these
records were probably a part of the
original tree, but disregarded during
repair, resulting in missing data.

2203   Folders were found that could not be traced
                 to the root folder.   Every folder in the
                 Catalog Tree should, in some direction,
                 point to the root folder.   If Folder A
                 contains Folder B, and Folder B contains
                 Folder C, Folder C still links to the
                 root folder (though its ancestor,
                 Folder A).   However, if Folder A claims
                 to be within Folder C, rather than the
                 root folder, then all of these folders
                 cannot link to the root folder.   The end
                 result is that all these folder will not
                 appear on the disk.   In these
                 cirumstances, MacMedic™ will change
                 Folder A's parent to the root folder,
                 thus linking all the folders to the root.

2300   The Catalog Tree Header has the wrong node
                 recorded as the root node.

2301   The Catalog Tree Header has the wrong depth
                 recorded as the total depth.

2302   The Catalog Tree Header has the wrong value
                 stored for the total number of nodes in
                 the Catalog Tree.

2303   The Catalog Tree Header has the wrong value
                 stored for the size of each Catalog Tree
                 node.

2304   The Catalog Tree Header has the wrong value
                 recorded for the maximum size a
                 Catalog Tree record can be.

2305   The Catalog Tree Header has the wrong node
                 recorded as the first leaf node.

2306   The Catalog Tree Header has the wrong node
                 recorded as the last leaf node.

2310   The Catalog Tree Header may have an
                 incorrect value set in one or more of its
                 reserved fields.

2311   The Catalog Tree Header has the wrong type
                 recorded as type of b-tree.

2312   The Catalog Tree Header attributes are

recorded incorrectly.

2313   The Catalog Tree Header has a bad value
                 recorded for its clump size.

3002   Extents Tree: The forward link of one node
                 does not agree with the backward link of
                 another node.

3005   The Extents Tree bitmap does not appear to

be consistant with the actual state of the
                 Extents Tree.

3006   An Extents Tree node has an incorrect depth
                 recorded.

3007   An Extents Tree offset pointer has an
                 incorrect or invalid downward link.   Using
                 offset pointers is a part of the
                 Extents Tree's method of bookkeeping.

3008	The number of leaf records, as stored in the Extents Tree Header, is incorrect.
3009	The number of free nodes, as stored in the Extents Tree Header, is incorrect.
300B	No root node for the Extents Tree could be found.
300C	A Extents Tree node has the wrong type listed.
300D	A Extents Tree node has the wrong number recorded for the total number of records

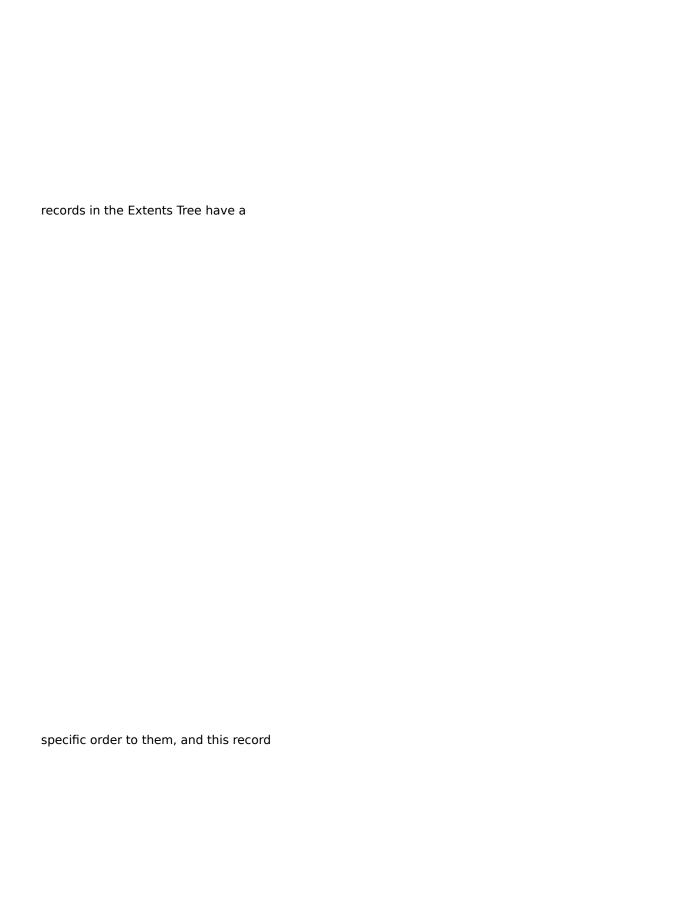it holds.

300E	A Extents Tree node contains an invalid record.
300F	Duplicate Extents records were found.

3010   An Extents Tree record was found in the

wrong location in the Extents Tree.   All

records in the Extents Tree have a

specific order to them, and this record

appears to violate this order.

3011   One of the bottom offsets in the Extents

Tree node appear to be incorrect.   These

offsets tell the node where each record

begins and ends.

3012   Two records in the Extents Tree share the same identifiers.   Each record has unique identifiesr to the system.   If two contain the same values, the system cannot accurately distinguish between the two records.

3020   There are not enough map nodes to suit the Extents Tree.   Map nodes indicate what nodes are in use, and what nodes are not. These maps nodes create the Extents Tree's bitmap.   There must be enough map nodes so that every node in the Extents Tree can be accounted for.

3021   An Extents Tree Header cannot be found.

3200   There are not enough extents in the Extents Tree for the actual size and offsets of the Extents Tree.   The Extents Tree stores all the fragments of the drive.   These fragments aren't

limited to just files.   The Extents Tree

also stores its own fragments, as well as fragments to other trees and data structures.

3201 There are too many extents in the Extents Tree for the actual size and offsets of the Extents Tree.   The Extents Tree stores all the fragments of the drive.   These fragments aren't

limited to just files.   The Extents Tree

also stores its own fragments, as well as
fragments to other trees and data
structures.

3202   There are not enough extents in the
Extents Tree for the actual size and
offsets of the Catalog Tree.

3203   There are too many extents in the
Extents Tree for the actual size and
offsets of the Catalog Tree.tree

3300   The Extents Tree Header has the wrong node
recorded as the root node.

3301   The Extents Tree Header has the wrong depth
recorded as the total depth.

3302   The Extents Tree Header has the wrong value
stored for the total number of nodes in
the Extents Tree.

3303   The Extents Tree Header has the wrong value
stored for the size of each Extents Tree
node.

3304   The Extents Tree Header has the wrong value
recorded for the maximum size a
Extents Tree record can be.

3305   The Extents Tree Header has the wrong node
recorded as the first leaf node.

3306   The Extents Tree Header has the wrong node

recorded as the last leaf node.

3310   The Extents Tree Header may have an
                 incorrect value set in one or more of its
                 reserved fields.

3311   The Extents Tree Header has the wrong type
                 recorded as type of b-tree.

3312   The Extents Tree Header attributes are
                 recorded incorrectly.

3313   The Extents Tree Header has a bad value
                 recorded for its clump size.

3400   The data in the extents for the Extents

Tree is incorrect.   The Extents Tree

stores all the fragments of the drive.

These fragments aren't limited to just

files.   The Extents Tree also stores its

own fragments, as well as fragments to

other trees and data structures.

3401   The data in the extents for the Catalog

Tree is incorrect.

4000   The data contained in a Volume BitMap is

not consistant with the actual state of

the drive.   It has certain blocks marked

as being used when they are actually

free, or certain blocks marked as being

free when they are actually being used.

4006   Certain files claim allocation blocks that
         other files also claim.   This is a very
         serious problem.   If this happens to you,
         you should move the involved files from
         the drive.   What could happen is, if one
         of the files are modified, the other file
         would be modified as well, resulting in
         data loss and corruption.

4102   Files were found with corrupt resource
         forks.   This is very serious.   The only
         way to fix this problem is to restore

these files from backups.

4103   Duplicate records were found on the drive.
               For example, there were two files found,
               both called File A, both located in the
               same folder.

4104   There were extents that "belong" to a

certain file.   However, this file cannot

be found on the disk.

4105   Folders were found with the wrong valence recorded.   A folder valence is how many files and folders are contained with that folder.   For example, if Folder A

contains 3 files and 4 folders, its

valence is 7.

| 4106 | Folders were found which has incorrect flags recorded. |
| 4107 | Files and folders were found with incorrect creation and modification dates.   The starting valid date begins at Jan 1, |

1984.   Modification dates are valid if

and only if they match the creation date,

or have a date later than the creation

date.

4108   Threads were found with incorrect names
stored in its data.   For every folder
there is a thread to complement it.   The
name of the folder stored in this thread
does not match its complement.

4109   Files were found in which its recorded size
does not match its physical size.

4110   Files were found with bundle bits set
incorrectly.   Either files with a BNDL
resource were found with their BNDL flag
turned off, or files without a BNDL
resource were found with their BNDL flag
turned on.   This is a very minor problem.
The main side-effect of this problem is
that these applications will have a
generic application icon.

5000   The signature to Block 0 is incorrect.   This
signature indicates that it is the start
of the Partition Map.   The signature
should be 'ER'.

5001   Block 0's block size is incorrect.

5002   Block 0's length is incorrect.

5010   An Apple Partition Map Entry (APME) couldn't
be found.   This entry defines the layout
of the Partition Map.

5011   The Apple Partition Map Entry has the wrong
number recorded for the number of

entries.

5012	An invalid Partition Map entry was found.
5013	A Partition Map entry has an incorrect offset.
5014	An HFS Partition Map entry does not point to a valid HFS area.
5015	The size of an HFS Partition Map entry may not have a correct size.
6000	The Boot Blocks appear to be invalid.