ACTIAN

Status Codes and Messages

Reference Manual

Zen v16

Activate Your Data™

Contents

About This Document

This documentation describes status codes and messages you may see while using Zen products. It is for developers, testers, and support personnel. The codes and messages may provide information about product installation, database server and client behavior, use of the utilities, or application execution. An explanation or corrective action accompanies each code or message.

The codes and messages are not specific to any one product or platform, and you may see references to utilities, products, or platforms that are not part of your product distribution.

We would appreciate your comments and suggestions about this document. Your feedback can determine what we write about the use of our products and how we deliver information to you. Please post your feedback in the community forum on the [website](#).

Status Codes

The status codes and messages listed here are generated by Zen components.

Status codes are not the same as numbered messages (see Messages). Messages are returned to end users by utilities or specific components and generally begin with a prefix and a number. For example: MKDE-16: There is insufficient memory to load the MicroKernel Engine.

Status codes are returned to an application calling a Zen interface. The application determines whether to display the status code to the user. Applications often display status codes in addition to helpful messages about a problem that has occurred, but the application developer determines this. Many utilities provided with Zen use transactional and relational access interfaces, and they may therefore return status codes as well as utility-specific messages.

Some messages include references to status codes.

The status codes in this documentation appear in numeric order. The following table lists the numeric ranges for each type of code.

Range	Type of Code
0	Successful Interface Completion Status Code
1 to 199	MicroKernel Engine Status Codes
1000 to 1999	MicroKernel Status Codes for Windows and DOS Workstations
2000 to 2099	Btrieve Requester Status Codes
2200 to 2299	XLT Status Codes
2300 to 2399	Named Database Status Codes
3000 to 3099	MicroKernel Router Status Codes
3100 to 3199	Network Services Layer Status Codes
4000 to 4099	Database Utilities Status Codes
5000 to 5999	Encryption Status Codes
6000 to 6050	Data Dictionary Status Codes
7000 to 7050	Distributed Tuning Interface Status Codes
7064 to 7140	License Administrator Status Codes
7200 to 7499	Authorization Status Codes

Range	Type of Code
8000 to 8499	Component Management Status Codes
8500 to 8589	ECAS Interface Status Codes
8590 to 8599	Database Engine Service Status Codes
10000 to 10100	SQL Connection Manager Codes
-1000 to -5300	Relational Engine Status Codes
-100 to -199	Informative Status Codes

Note: The status codes listed here may refer to utilities, products, or platforms that are not part of your product distribution.

0

Successful Interface Completion Status Code

Any interface call can return the following status code.

0: The interface completed successfully

This status code is returned for any interface call that completes successfully. If an operation is not successful, a nonzero status code is returned.

1 to 199

MicroKernel Engine Status Codes

This section describes status codes that the MicroKernel Engine returns.

1: The operation parameter is invalid

The specified operation does not exist or is not valid.

You may receive this error if you are running a general-release version of the V8 client software against a prerelease version of the V8 database engine. If this is the case, you must uninstall your database engine and install the general release version.

You can also receive this status code if you try to create or access a local file on a client and you do not have a Workgroup engine installed or if you try to access a local file on a server and the server engine is not running.

2: The application encountered an I/O error

This status code typically indicates a corrupt file, an error while reading from or writing to the disk. One of the following has occurred:

- The file is damaged, and you must recover it. See *Advanced Operations Guide* for more information on recovering files.

- For pre-6.0 data files, there is a large pre-image file inside a transaction, and there is not enough disk space for a write to the pre-image file.

- For pre-6.0 data files, there is one pre-image file for multiple data files. For example, if you name the data files customer.one and customer.two, both files have pre-image files named customer.pre.

- For pre-6.0 data files that are larger than 768 MB, there is a conflict among locking mechanisms. The file has not been corrupted. Your application can retry the operation until the conflict is resolved (when the competing application releases the lock your application requires).

- A pre-6.0 Btrieve engine attempted to open a 6.x or later MicroKernel file.

- With Btrieve for Windows NT Server Edition v6.15.445, 32 bit Windows application may return Status 2 or "MKDE Terminated with Service Specific Error 0" after running an application for an extended period of time.

3: The file is not open

The operation cannot execute because the file is not open. The application must perform a successful Open operation before the MicroKernel can process any other operations. The MicroKernel also returns this status code if the application passed an invalid position block for the file, or if the application passed a position block with a client ID other than the client ID used to open the file.

4: The application cannot find the key value

The MicroKernel cannot find the specified key value in the index path.

- When you receive this status code on an Update or Delete operation, it usually means that the file is damaged, and you must recreate it. Occasionally, a corrupt key can cause this status code. Drop the key, then add it again.

- The MicroKernel returns this status code when an application performs a Get Equal operation to search on field type char. It is caused by a mismatch of two fields at the char level. To resolve, fill the KeyBuffer with the same fill char type as the field.

5: The record has a key field containing a duplicate key value

The MicroKernel cannot add or update a record because the record has a key field that contains a duplicate key value for an index that does not allow duplicate values. The MicroKernel also returns this status code when it cannot create an index that does not allow duplicate key values because a duplicate key value already exists.

6: The key number parameter is invalid

The value stored in the key number parameter is not valid for the file being accessed. The key number must correspond to one of the keys defined for the file. Valid key numbers are 0 through 118.

7: The key number has changed

The key number parameter changed before a Get Next, Get Next Extended, Get Previous, or Get Previous Extended operation. The operation requires the same key number parameter as the previous operation, because the MicroKernel uses positioning information relative to the previous key number.

In a related situation, the MicroKernel returns this status code when an application performs a Delete or Update operation immediately following a Get operation. If the application changes the value of the key number in the Delete or Update operation (from the value used with the preceding Get operation), the MicroKernel deletes or updates the record as requested and does *not* return this status code, at least not at this point. However, the MicroKernel *does* return this status code on the very first Get Next, Get Next Extended, Get Previous, or Get Previous Extended operation performed after the deletion or update, even if that Get operation uses the same key value the application passed to the Delete or Update operation.

If you need to change key numbers between consecutive Get Next, Get Next Extended, Get Previous, or Get Previous Extended operations (or in Delete or Update operations as described in the preceding paragraph), use a Get Position operation followed by a Get Direct/Record operation to reestablish positioning for the new index path.

8: The current positioning is invalid

You must establish the current position in order to update or delete a record. Perform a Get or Step operation to establish the current position. The MicroKernel also returns this status code if the application passed an invalid position block for the file.

9: The operation encountered the end-of-file

The MicroKernel returns this status code in the following situations:

- The operation encountered an end-of-file boundary or tried to read past a file boundary (end-of-file or start-of-file).

- In a Get Next Extended, Get Previous Extended, Step Next Extended, or Step Previous Extended operation, the number of records satisfying the filtering condition is less than the number of specified records to be returned, and the reject count or filter limit has not been reached.

- When reading a file in ascending order according to an index path, the MicroKernel has already returned the last record in that index path. When reading a file in descending order according to an index path, the MicroKernel has already returned the first record in the index path.

- When using the Get By Percentage operation, either the value supplied for the percentage is too high – it exceeds 10,000 decimal (0x2710) – or the file contains no records.

- When using the Get operation using ActiveX Data Control, this error will occur only after the application is compiled and deployed. This error will not occur at design time during development. The error results from a missing MSDADC.DLL on the deployment machine. Make sure to include this file (MSDADC.DLL) in your installation script. This file is a Microsoft MDAC (Microsoft Data Access Component) file.

Note: See the Actian knowledge base at the Actian website for new and updated articles on Btrieve ActiveX Controls.

10: The key field is not modifiable

During an Update operation, the application attempted to modify a key field that cannot be modified by definition.

11: The specified file name is invalid

The MicroKernel returns this status code in the following situations:

- The specified file name does not conform to file naming conventions or the path name is invalid. Make sure the file name or path name is valid for the environment.

- The specified combined path and file name in a non-English language is greater than 260 bytes when converted to UTF-8. The workaround is to shorten the path or file name or replace non-English characters with English ones.

- If you are operating in the client-server environment:

  - The application attempted to open a file that has .^^^ as its extension. This extension is reserved for the MicroKernel to use during continuous operation.

  - The data buffer for a Begin or End continuous operation is not set up correctly.

  - You attempted to load a remote file when your client configuration settings for **Local MicroKernel Engine** and **Use Remote MicroKernel Engine** are incorrectly set to **On** and **Off**, respectively. To resolve this condition, at the client workstation, open Zen Control Center. Under the Access properties category for **MicroKernel Router**, set **Use Remote MicroKernel Engine** to **On**. For more information, see To set the properties in ZenCC for a local client in *Advanced Operations Guide*.

  - You attempted to open a local file with a Workgroup engine that is not the designated gateway engine for the file. Go to the directory where the file you attempted to open

resides. Check to see if the ~PVSW~.LOC file in that directory is flagged read-only. If it is, change it to read-write.

- If you are using the dynamic locator file with your Workgroup engine:

  - Make sure the name of the second-level locator file specified in your first-level locator file does not have the same name as an existing directory. Also, make sure they are all on the same drive.

  - Make sure the second-level locator file specified in your first-level locator file can be accessed by the engine.

  - Make sure all the Workgroup engines sharing the dynamic locator feature have the exact same drive mapping to the server location where the data files reside.

- If you are accessing files on a DOS client:

  - A NET START FULL for the Windows for Workgroups workstation was not used when it was booted into DOS. Use a NET START FULL to get a full redirector in the DOS client mode. BREQNT.EXE requires a full redirection. At the DOS prompt type net ver and press Enter. Here is the list of required components for a DOS workstation to connect to a Windows server:
    LSL.COM LAN Card Driver
    IPXODI.COM
    IFSHLP.SYS
    NET START FULL

    These can be loaded high, using emm386. NET START FULL will load in upper memory.

- You attempted to open a file with a long file name on NSS volumes. The MicroKernel queries the volumes using operating system calls and then loads the appropriate drivers for the associated name spaces it find for the volumes. In this case, the MicroKernel was being loaded before mounting the volumes so it did not find the requirement for long file name support by the NSS volumes.

  - Issue the MGRstart or Bstart command after loading the volumes. An example would be:
    LOAD NSS
    MOUNT ALL
    SYS:ETC\INITSYS.NCF
    MGRSTART or BSTART

- The embedded spaces configuration setting is turned on. "On" is the default starting with PSQL v9. Change the setting to off if your applications do not allow embedded spaces in file names.

- If you are working in the Microsoft Remote Desktop Services (formerly Terminal Server) environment:

  - Approximately 5 users can work in a Windows application on 2 different terminal servers that are connected to a primary Windows server. If you have attempted to run on top of this limit, you will receive status codes 11 and 35. For the recovery solution for this instance, see Microsoft Knowledgebase Article 190162, "Terminal Server and the 2048 Open File Limitation."

12: The MicroKernel cannot find the specified file

The MicroKernel may return this status code for a number of reasons, which have different solutions.

- Check that the file exists and that you specified the correct file.

- Check the key buffer parameter to make sure the path name is terminated with a blank or a binary zero.

- When accessing a file on a server, ensure that you have file scan rights to the directory in which the file resides. Occasionally, a corrupt key can cause this status code. Drop the key, then add it again.

- This error code may also be returned when the file dbnames.cfg has been removed and old data source names (DSNs) that reference that file are not removed from the ODBC configuration.

- You attempted to open a local file with a Workgroup engine not designated as the gateway engine for the file. Go to the directory where the file you attempted to open resides. Check to see if the ~PVSW~.LOC file in that directory is flagged read-only. If so, change it to read-write.

- You may have a status 12 returned and see X$FILE.DDF for the file name in your DDFs.

  - If the file.ddf is examined with a Btrieve utility, the location name for the dictionary files will be x$file.ddf, x$field.ddf, x$index.ddf, instead of the standard file.ddf, field.ddf, index.ddf. An unsupported DDF Creation utility called DDL Services (ddlsvcs.dll) created the DDFs. DDL Services has a known bug that causes the system table to be populated with incorrect data.

- You may get status 12 when a file with a file name or path with embedded spaces is opened on certain Windows 32-bit platforms. Btrieve data files can be accessed using long names, but long names cannot be used for other files.

To enable embedded spaces

1. Start **Zen Control Center**.

2. Expand the nodes for **Zen**.

3. Expand the **Local Client** node.

4. Right-click **MicroKernel Router** and select **Properties**. Log in if prompted.

5. Click **Application Characteristics**.

6. Enable **Embedded Spaces**.

13: The MicroKernel could not open the extension file for an extended file

The MicroKernel could not open the extension file for an extended file that the application tried to open. An extended file can consist of a base file and up to 31 extension files. Extension files must remain in the same volume and directory as their base files. The MicroKernel returns this status code if you delete, move, or rename the extension files.

14: The MicroKernel cannot create or open the pre-image file

The MicroKernel uses pre-image files only for data files before version 6.

The MicroKernel returns this status code in one of the following situations:

- The MicroKernel cannot create a new pre-image file because the disk directory is full. The MicroKernel must be able to create a pre-image file.

- The MicroKernel cannot open the pre-image file to restore file integrity. If the pre-image file is erased or damaged, the MicroKernel cannot restore the file integrity. See *Advanced Operations Guide* for more information about recovering damaged files.

- The workstation MicroKernel cannot assign a handle to the pre-image file because the MicroKernel was not started by a user with access rights to the pre-image file.

- The file structure of a pre-image file created by this MicroKernel is different from the file structure of a pre-image file created by a v5.x MicroKernel. If you have an extraneous .PRE file in v5.*x* format, the MicroKernel returns this status code when you try to open the data file to which the .PRE file belongs.

15: The application encountered an I/O error during pre-imaging

The MicroKernel uses pre-image files only for pre-6.0 data files.

- The pre-image file is damaged and the integrity of the data file cannot be ensured. See *Advanced Operations Guide* for more information about recovering damaged files.

- The disk is full. Erase any unnecessary files.

16: The application encountered an expansion error

This status code became obsolete in MicroKernel version 6.0.

The MicroKernel encountered an error while writing the directory structure to disk prior to creating the expanded file partition. Either the MicroKernel cannot close the file, or a new page was added to the file and the MicroKernel cannot close and reopen the file to update the directory structure. Check for a disk hardware failure.

18: The disk is full

The MicroKernel can return this status code in the following situations:

- The disk is full and the MicroKernel cannot expand the file to accommodate additional records. Erase any unnecessary files.

- There is not enough space to append a new page to the data file.

- The pre-image file is out of disk space. If your files are in pre-6.0 format and you are in a transaction, the pre-image file size increases for the duration of the transaction. If you receive this status code, either reduce the number of operations in the transaction, or obtain more disk space.

- In some environments, you can restrict the amount of disk space available to each user. This status code indicates that the application attempted to expand a data file beyond the amount of disk space allocated to the file owner.

- You tried to read or modify a file which was not closed properly after a disk full error. Make sure that every application using the file at the time of the disk full error closed the file successfully.

- If a client connected to a Zen server encounters this status code, other clients performing read-only operations from the same disk may also receive a non-zero status.

19: The application encountered an unrecoverable error

To ensure file integrity, recover the file as described in *Zen User's Guide*.

20: The MicroKernel or Btrieve Requester is inactive

Note: For more recovery solutions, see the Actian knowledge base at the Actian website for new and updated articles on troubleshooting this status code.

Note: .

- If you are running an application in a client/server environment:

  - Make sure the Btrieve requester is loaded.

  - Verify that the TCP/IP protocol is properly installed at the client machine and that no two machines on the network have the same network address.

  - Make sure at least one of the client configuration options, **Access** > **Use Local MicroKernel Engine** or **Access** > **Use Remote MicroKernel Engine** is enabled. If your environment includes both a server engine and Workgroup engines, you should have both settings enabled.

- If you are running an application in a workstation/workgroup environment, make sure the MicroKernel is loaded.

- If you are running an application in a client/server environment and also need to access files located on a local drive:

  - Make sure the Btrieve Requester is loaded.

  - Make sure both of the client configuration options, **Access** > **Use Local MicroKernel Engine** or **Access** > **Use Remote MicroKernel Engine** are enabled.

  - Make sure a local MicroKernel is available and loaded.

- If you are operating in a DOS server environment:

  Zen installs BTRBOX95 by default. As long as it is installed, no other requester can be used.

  - If you want to use BTRBOX95, then run the setup utility. This loads the appropriate file for clients running Windows 32-bit operating system. After installation, restart the client.

  - For Windows 32-bit platform users: Open a command prompt and run a DOS Btrieve application.

- If you are operating in a Windows server environment:

  - Make sure the MicroKernel is started before generating any requests.

  - Make sure the Windows DLLs are in your path.

  - Make sure the appropriate communications modules are loaded at the server.

21: The key buffer parameter is too short

The key buffer parameter is not long enough to accommodate the key field for the requested index path. Verify that the length of the key buffer equals the defined length of the key specified in the key number parameter.

22: The data buffer parameter is too short

- The data buffer parameter specified by the application was not large enough to accommodate either the minimum length of the record for an Insert or Update operation, or the entire record length for a Get or Step operation. Also, the data buffer may not be large enough to accommodate the length of data required for operations such as Create, Create Index, Stat, Get By Percentage, Find Percentage, or Version.

    - For Get or Step operations, the MicroKernel returns as much data as it can and this status code, indicating that it cannot return the entire record.

    - For an Insert operation, the MicroKernel does not insert the record if the data buffer is shorter than the fixed-length portion of the record.

    - For an Update operation, if the data buffer is too short to contain the fixed-length portion of a record, the MicroKernel does not update the record.

    - For the Create, Stat, and Create Index operations, the data buffer is not long enough to contain all the file specifications, the key specifications, and (if specified) the Alternate Collating Sequence (ACS) definition.

    - For the Get by Percentage or Find Percentage operation, the data buffer length is less than 4 bytes.

    - For the Version operation, the data buffer length is less than 5 bytes.

    - The data buffer parameter is too short when access table with more than 60 field using ActiveX. Download the latest ActiveX controls from the Actian website.

- A corrupt file may be indicated if the file allows variable-length records and you receive this status code on a Get or Step operation. In such a corrupt file, you can receive status code 54 when you use Get or Step operations to read other records. Recover the file using the instructions in *Zen User's Guide*.

23: The position block parameter is not 128 bytes long

This status code became obsolete in Btrieve language interface version 6.0.

The position block parameter must be exactly 128 bytes long.

24: The page size or data buffer size is invalid

The MicroKernel returns this status code in one of the following situations:

- The page size you specified when creating a file is invalid. The page size must be a multiple of 512 bytes and cannot exceed 4096 bytes (up to 8.x file format) or 8192 bytes (9.0 file format) or 16384 (9.5, 13.0, and 16.0 file formats).

- During a Create operation, the page size is the first file specification the MicroKernel checks. If you receive this status code at this point, it can indicate an invalid data buffer parameter.

25: The application cannot create the specified file

The MicroKernel returns this status code in one of the following situations:

- If an application attempted to create a data file, the disk directory or the disk itself may be full.

- If an application tried to create a file over an existing file, the existing file is open or the operating system will not allow the operation for another reason.

- In an attempt to create a Btrieve file over existing Btrieve file, this status will be returned. The keybuffer on the Btrieve create operation API (op code 14) is set properly to create a file over an existing file.

  - This problem may be caused by antivirus software.

Note: This happens when the operating system returns an unusual status code to the engine. Normally, the engine expects either a success or the file already exists. In one situation, the error code was being returned because the file handle that the engine was using was not functional; however, the operating system call that the engine makes is supposed to return a file handle.

One solution is to disable the Antivirus software. Contact the third party vendor for additional information on configuring the Antivirus software to eliminate scanning specific data files.

26: The number of keys specified is invalid

The number of keys specified for the page size is invalid. Note that the maximum number of *keys* is 119 for all file versions.

The number of *key segments* can vary but must be within the limits shown by the following table.

Page Size (bytes)	Maximum Key Segments by File Version			
	8.x and earlier	9.0	9.5	13.0, 16.0
512	8	8	Rounded up[2]	Rounded up[2]
1024	23	23	97	Rounded up[2]
1536	24	24	Rounded up[2]	Rounded up[2]
2048	54	54	97	Rounded up[2]
2560	54	54	Rounded up[2]	Rounded up[2]
3072	54	54	Rounded up[2]	Rounded up[2]
3584	54	54	Rounded up[2]	Rounded up[2]
4096	119	119	204[3]	183[3]
8192	n/a[1]	119	420[3]	378[3]
16384	n/a[1]	n/a[1]	420[3]	378[3]

[1]"n/a" stands for "not applicable."

[2]"Rounded up" means that the page size is rounded up to the next size supported by the file version. For example, 512 is rounded up to 1024, 2560 is rounded up to 4096, and so forth.

[3]A 9.5 format or later file can have more than 119 segments, but the number of indexes is limited to 119.

Conditions For Which Status Code 26 Is Returned

The following conditions apply to the Btrieve Create operation. See Create (14) in *Btrieve API Guide*.

- Number of keys or key segments exceeds the permissible limit for the given file format and page size. The maximum number of keys is 119 for all file formats and page sizes. The number of segments is listed in the table above.

- A key-only file is being created and more than one key is supplied in the data buffer.

- A key-only file is being created, the Reserve Duplication Pointers flag is on, and the Number of Duplicate Pointers to Reserve field is equal to or greater than 1.

- The number of segments specified in the data buffer exceeds the limit for maximum segments.

- The Number of Duplicate Pointers to Reserve field exceeds the maximum number of keys.

The following condition applies to the Btrieve Create Index API operation. See Create Index (31) in *Btrieve API Guide*.

• The number of segments specified in the data buffer exceeds the limit for maximum segments.

Nullable Columns

Note that nullable columns must also be considered. For example, in a data files with 4096 byte page size you are limited to 119 index segments per file. Because each indexed nullable column with true null support requires an index consisting of 2 segments, you cannot have more than 59 indexed nullable columns in a table (or indexed nullable true null fields in a Btrieve file). This limit is smaller for smaller page sizes.

Any file created with file version set to 7.x or later, and TRUENULLCREATE set to the default value of On, has true null support. Files created using an earlier file format, or with Pervasive.SQL 7, or with TRUENULLCREATE set to Off, do not have true null support and do not have this limitation.

27: The key position is invalid

The specified key field position is less than 1 or exceeds the defined record length for the file. Either the key position is greater than the record length or the key position plus the key length exceeds the record length.

28: The record length is invalid

The physical record length, which is the logical record length specified when creating the file plus any additional overhead for duplicate keys, reserved duplicate pointers, variable record pointers, and blank truncation information must be less than or equal to the page size minus 10 bytes (8 bytes if creating files in version 5 file format), and must be greater than or equal to 4 bytes.

For key-only files, the maximum record length is 253 bytes (255 bytes if creating files in version 5 file format).

For more information about calculating the physical record length, see *Zen Programmer's Guide*.

29: The key length is invalid

The MicroKernel returns this status code for the following situations pertaining to the Btrieve Create or Create Index API operations. See Create (14) and Create Index (31), both in *Btrieve API Guide*.

• The length of the entire key (all segments) exceeds 255, or 1024 for 16.0 format files.

- The length of the entire key (all segments) is so large that less than 4 keys fit on a key page. For example, a 200 byte key on a 512 byte page.

- A key segment length is 0 or greater than 255 bytes, or 1024 for 16.0 format files. The length of a key segment must agree with its key type if the key type implies a length (for example, an integer key must have a length evenly divisible by two). Each key page in the file must be large enough to hold at least four keys. If the page size is too small to accommodate four occurrences of the specified key length (plus overhead), you must increase the file page size or decrease the key length.

  An additional byte of storage space is needed for the null indicator for the column. This error occurs through a SQL CREATE INDEX statement, or through the creation of a SQL PRIMARY KEY or FOREIGN KEY, if the index, or key, references a nullable CHAR or VARCHAR column that matches the maximum key size for the file. To resolve the error, reduce the size of the column or create the column as NOT NULL and try again. For a foreign key, if you decrease the size of the column, you must decrease both the referencing column and the referenced column.

- A key segment length has a value other than 2, 4, or 8 and its data type is AUTOINCREMENT.

- A key segment data type has a specified length that does not match any length allowed for it. For allowed key lengths, see Btrieve Key Data Types in *SQL Engine Reference*.

- A key segment data type is NUMERICSTS and the segment length is less than 2.

- A key segment data type is CURRENCY, AUTOTIMESTAMP, TIMESTAMP, or TIMESTAMP2 and the segment length is not 8.

- A key segment data type is NULL INDICATOR SEGMENT and the segment length is not 1.

- A key segment data type is GUID and the segment length is not 16.

- A key segment data type is BINARY ("Use Old Style Binary Data Type" flag is "on") and the segment length is odd.

30: The file specified is not a MicroKernel file

This status code is returned in one of the following situations:

- The database engine attempted to access a valid Btrieve file but could not recognize it. One such scenario is an older engine trying to read a file created by a newer one. Whereas backward compatibility enables a newer engine to use an older file, an older engine usually cannot use a newer file because later features make the file format incompatible.

- The MicroKernel did not create the file.

- The first page of the file may be damaged. Use a backup copy of your data file. If you receive this status code and you suspect that the header page of the source file is damaged, recover the file as described in *Advanced Operations Guide*.

Note: Previously, a status 2 application I/O error was returned when a pre-6.0 Btrieve engine attempted to open a 6.x or later MicroKernel file.

31: The file is already extended

This status code became obsolete in MicroKernel version 6.0.

An application tried to extend a file that had already been extended; you can only extend a file once.

32: The file cannot be extended

The MicroKernel must create an extension file to accommodate a file which is growing larger than the operating system file size limit. However the MicroKernel encounters an error from the operating system when it tries to create and open the new extension file. Possible causes for receiving this status code include the following: the directory is full, the disk is full, or the MicroKernel has not been granted sufficient rights by the operating system.

33: The MicroKernel cannot unload

In the DOS environment, The MicroKernel returns this status code for the following reasons:

- You attempted to unload the MicroKernel when you have loaded another terminate and stay resident (TSR) program after you loaded the MicroKernel. Unload the other TSR before unloading the MicroKernel.

- You attempted to unload the MicroKernel from a 32-bit application that uses the BSTUB interface with the DOS/4G extender.

34: The specified extension name is invalid

This status code became obsolete in MicroKernel version 6.0.

An application specified an invalid file name for the extended partition. Check the validity of the file name.

35: The application encountered a directory error

Either a Get Directory operation specified a drive that does not exist, or a Set Directory operation specified an invalid pathname. Check the validity of both the drive and the pathname.

37: Another transaction is active

The application issued a Begin Transaction (19 or 1019) operation while another transaction was active by the same user or task; the active transaction can be nested or non-nested. This status code often indicates a problem in nested transactions within your application.

38: The MicroKernel encountered a transaction control file I/O error

This status code became obsolete in MicroKernel version 7.0.

The MicroKernel tried to write to the transaction control file. Possible causes for receiving this status code are that the disk is full, the disk is write protected, the transaction control file (BTRIEVE.TRN) that is created when you load the MicroKernel has been deleted, or the transaction control file is flagged read-only or is corrupt.

39: A Begin Transaction operation must precede an End/Abort Transaction operation

The application issued an End Transaction (20),or Abort Transaction (21) operation without a corresponding Begin Transaction (19 or 1019) operation. Make sure that each End or Abort Transaction operation in your program is executed only after a successful Begin Transaction operation.

40: The file access request exceeds the maximum number of files allowed

This status code became obsolete in MicroKernel version 6.0.

The application tried to access more than the maximum number of files allowed within a transaction. You set the maximum number of different files that you can access during a logical transaction when you configure the MicroKernel.

41: The MicroKernel does not allow the attempted operation

The application tried to perform an operation that is not allowed under certain conditions. For example:

- The application attempts to perform a Step operation on a key-only file.

- If using a server engine, the key number parameter of a continuous operation MicroKernel call is not valid.

- The MicroKernel prohibits certain operations during transactions because they have too great an effect on the file or on performance. These operations include Set Owner, Clear Owner, Create Index, and Drop Index.

- An application running on a 9.x or higher engine attempts to create a format file prior to 6.x (0600).

- An application issued an Extended Delete operation (op codes 85–88) in an environment where AuditMaster 15 or DataExchange 15 is running.

42: A file previously opened in Accelerated mode was not closed

This status code became obsolete in MicroKernel version 6.0.

The MicroKernel returns this status code for the following reasons:

- Either the application tried to open a v5.x data file that was previously accessed in Accelerated mode by a v5.x MicroKernel and never successfully closed, or the application tried to open a file for which a 6.0 or later MicroKernel encountered an unrecoverable error during a Set or Clear Owner operation. The file integrity cannot be ensured. See *Advanced Operations Guide* for information about recovering damaged files.

- Your application tried to open a file in MicroKernel v5.x format using a v5.x MicroKernel; however, that same file was previously accessed by a 6.0 or later MicroKernel, which failed to close the file successfully and left a pre-image file on the disk. Version 5.x MicroKernels cannot read pre-image files created in 6.0 or later format.

43: The specified record address is invalid

The MicroKernel returns this status code for the following reasons:

- The record address specified for a Get Direct operation is invalid. Either the address is outside the file boundaries, or it is not on a record boundary within or on a data page, or the record at the specified address has been deleted. For a Get Direct operation, specify the 4-byte address obtained by a Get Position operation.

- If the records' file is in v5.x format, this status code can indicate a file access conflict. For example, task 1 has a file locked in an exclusive transaction. Task 2 is reading records from the same file and tries to update a record that the transaction inserted. If task 2 reads the record

and then task 1 aborts the transaction, task 2 receives this status code when issuing the Update operation.

- For a Find Percentage operation that is seeking a percentage based on a record's physical location within the file, the specified record address is invalid.

- The file may be corrupt, and you must recover it. See *Advanced Operations Guide* for information about recovering damaged files.

44: The specified key path is invalid

The application tried to use the Get Direct/Record operation to establish positioning on an index path for a key whose value is null in the corresponding record. The MicroKernel cannot establish positioning based on a null key value.

45: The specified key flags are invalid

The key flags specification on a Create operation is inconsistent. If a key has multiple segments, the duplicate, modifiable, and null attributes should be the same for each segment in the key. Also, you cannot use the null or manual key attributes in a key-only file. The MicroKernel also returns this status code if the application attempted to specify a different Alternate Collating Sequence (ACS) for two or more segments of a segmented key.

46: Access to the requested file is denied

The MicroKernel returns this status code for the following reasons:

- The application opened a file in read-only mode and tried to perform a Write operation on that file.

- The application attempted to perform a Write operation on a file that is flagged read-only by the operating system.

- When the application opened the file, it did not provide the correct owner name required for updates. For more information, see status code 51: The owner name is invalid.

- (Workgroup engine only) If a Workgroup engine user or task opens a file that a client machine has opened using a server MicroKernel, the MicroKernel returns this status code if the Workgroup engine user attempts to write to the file.

- (9.x and higher engines only) The application attempted to perform a Write operation on a 5.x format file. When using a 9.x or higher engine, you cannot perform a write operation such as insert or delete on a 5.x format file.

47: The number of files opened exceeds the maximum allowed

This status code became obsolete in MicroKernel version 6.0.

Pre-6.0 workstation MicroKernels return this status code when the number of files opened in Accelerated mode exceeded the number of buffers available in the MicroKernel cache. When a file is opened in Accelerated mode, the MicroKernel reserves one of its cache buffers for the file. It always reserves five empty buffers for index manipulation. Reconfigure Btrieve with both a smaller **/P** configuration option (to allocate more buffers) and a larger **/M** option (to increase the cache allocation).

48: The alternate collating sequence definition is invalid

The MicroKernel returns this status code for the following reasons:

- The first byte of an Alternate Collating Sequence (ACS) definition (the identification byte) does not contain the hexadecimal value *AC* (for user-defined ACSs), *AD* (for locale-specific ACSs), or *AE* (for international sorting rules support). Make sure that the first byte contains the appropriate value.

- You set the **Create File Version** option to v5.x, and you attempted to create a file that contains a key with a locale-specific ACS. Pre-6.0 files do not support locale-specific ACSs.

49: The extended key type is invalid

The MicroKernel returns this status code for the following reasons:

- You tried to create a file or an index with an invalid extended key type.

- You tried to assign an Alternate Collating Sequence (ACS) to a BINARY key or key segment. You can assign an ACS only to a STRING, LSTRING, WSTRING, WZSTRING, or ZSTRING key type.

- You defined an index requiring an ACS, but no ACS definition exists either in the file or in the key definition passed in the data buffer.

- You attempted to create a key segment with both the Case Insensitivity and the ACS flags set, and the MicroKernel is configured to create files in 5.*x* format. This combination is invalid for 5.x files.

- You set **Create File Version** value to 5.x, and then tried to create a file with a NUMERICSA or NUMERICSTS key. Pre-6.x files do not support these key types.

- You set **Create File Version** to 6.x, and then tried to use one of the 7.x data types, such as CURRENCY or TIMESTAMP. Pre-v7.x files do not support these key types.

- You set **Create File Version** to 9.0 or an earlier version and then tried to use a newer data type, such as AUTOTIMESTAMP, GUID, or TIMESTAMP2. Older file versions do not support these data types.

To change the Create File Version setting:

1. Start **Zen Control Center**.

2. Expand **Engines** and find the desired engine name.

3. Right-click on the engine name and select **Properties**.

4. Click **Compatibility**.

5. In the right-hand frame, change the **Create File Version**.

50: The file owner is already set

The application tried to perform a Set Owner operation on a file that already has an owner. Use the Clear Owner operation to remove the previous owner before specifying a new one.

51: The owner name is invalid

The MicroKernel returns this status code for the following reasons:

- If the application received this status code from a Set Owner operation, the owner names specified in the key buffer and data buffer do not match.

- If this status code occurred during an Open operation or a DROP TABLE statement, the application attempted to open a file that has an owner name assigned to it. The application must specify the owner name in the data buffer. Ensure that the owner name is null-terminated and that the data buffer length is long enough to include the owner name plus the null terminator.

- The owner name string failed to meet the following requirements:
  - Short owner names must be no longer than 8 characters.
  - The length limit of a long owner name depends on the file format.

For more information, see Owner Names in *Advanced Operations Guide*.

52: An error occurred while writing to the cache

This status code became obsolete starting as of MicroKernel version 6.0.

While trying to make a cache buffer available, the MicroKernel attempted to write data to a disk from a file that was previously opened in Accelerated mode. The operating system returned an I/O error during the write. This generally indicates a hardware memory problem. Unload and reload Btrieve before you continue.

53: The language interface version is invalid

An application tried to access a file containing variable-length records with a language interface from Btrieve v3.15 or earlier.

54: The variable-length portion of the record is corrupt

During a Get or Step operation, the MicroKernel could not read all or part of the variable-length portion of a record. The MicroKernel returns as much data as possible to the application. This status code usually indicates that one or more pages used to store variable-length records are corrupt. Check the data buffer length the MicroKernel returns to see how much of the record was returned. Recover the damaged file as described in *Zen User's Guide*.

55: The application specified an invalid attribute for an AUTOINCREMENT key

The data field indexed by an autoincrement key can be part of a different segmented key only if the key number of the autoincrement key is less than the key number of the new segmented key and the new data type flag referencing the field is not AUTOINCREMENT

56: An index is incomplete

An index can be damaged if a Create Index operation (31) or a Drop Index operation (32) is interrupted before it runs to completion. Perform a Drop Index operation to completely remove the damaged index from the file, then rebuild the index with the Create Index operation, if desired.

57: An expanded memory error occurred

This status code became obsolete in MicroKernel version 6.0.

Btrieve for DOS returns this status code if it receives an error from the Expanded Memory Manager. This status code usually means that the MicroKernel was unable to save or restore the memory mapping register context, indicating an incompatibility with another application that uses expanded memory.

58: The compression buffer length is too short

This status code became obsolete in Pervasive.SQL 2000i.

59: The specified file already exists

During a Create operation, the application specified -1 in the key number parameter and the name of an existing file in the key buffer parameter. To overwrite the existing file, remove the -1 from the key number parameter. To preserve the existing file, alter the file name specified in the key buffer parameter.

60: The specified reject count has been reached

The MicroKernel rejected the number of records specified by the reject count before a Get Next Extended, Get Previous Extended, Step Next Extended, or Step Previous Extended operation found the requested number of records that satisfy the filtering condition. Check the first two bytes returned in the data buffer for the number of records that were retrieved.

61: The work space is too small

The Get Next Extended, Get Previous Extended, Step Next Extended, and Step Previous Extended operations use a buffer as work space. This status code indicates that the work space (set by default to 16 KB) is not large enough to hold the filtering data buffer structure and the largest record to be received. You will receive status code 0 if the work space is large enough to hold the filter/extraction expression and enough of the record to include all of the fields to be filtered or extracted.

62: The descriptor is incorrect

This status code is returned in the following situations:

- The descriptor (data buffer structure), which is passed for a Get Next Extended, Get Previous Extended, Step Next Extended, Step Previous Extended, or Delete Extended operation, is incorrect. The descriptor length (the first two bytes of the data buffer) on the extended operation call must be the exact length of the descriptor. This requirement does not apply to the data buffer length option, which can still be declared longer than necessary.

- On a Stat Extended operation, the signature field in the data buffer is not set to 0x74537845, the subfunction field is not set to 0x00000001, or the Zen Explorer field is not set to 0x00000000.

- On a Get Direct/Chunk or Update Chunk operation, the descriptor structure in the data buffer is incorrect, or is inconsistent either internally or with respect to the data buffer length.

- ActiveX control buffers are not cleared and reallocated. Use the Init method to clear and reallocate the control's buffers before the use of any extended operations in the code. In addition, if you are using AutoMode, it is necessary to establish logical position (GetLast, GetFirst, GetEqual, and so forth) before making the call to Init.

63: The data buffer parameter specified on an Insert Extended operation is invalid

An Insert Extended operation provided an invalid buffer. Either the buffer length is less than 5 bytes, or the number of records specified is 0. Correct the buffer length or the number of records.

64: The filter limit has been reached

The MicroKernel Engine returns this status code during an extended Get or Step operation when a rejected record is reached and no other record can satisfy the specified filter moving in the given direction of the operation. This status code applies only if the first segment of the key specified by the key number is also used as the first term of the filtering field.

65: The field offset is incorrect

The field offset in the extractor of an extended Get or Step operation is invalid based on the retrieved record length. Make sure that the field offset is a valid value from 0 to the record length minus 1.

66: The maximum number of open databases has been exceeded

This status code became obsolete in Pervasive.SQL 2000i.

The MicroKernel tried to open files bound to too many MicroKernel databases. To avoid receiving this status code, you must set a higher value for the number of databases that the MicroKernel can open.

See *Advanced Operations Guide* for more information about bound files.

67: The MicroKernel cannot open the SQL data dictionary files

The MicroKernel returns this status code for the following reasons:

- An application attempted to use a data file that is bound to a the MicroKernel database, but the MicroKernel could not open one of the MicroKernel data dictionary files (FILE.DDF or, if the file has RI definitions, RELATE.DDF) or the configuration file (DBNAMES.CFG).

- You attempted to create a file with the **Replace** option, and a bound MicroKernel data file with the same name and location already exists. However, the MicroKernel could not open the MicroKernel data dictionary file FILE.DDF, or the configuration file (DBNAMES.CFG).

If the data file has RI definitions, be sure that FILE.DDF and RELATE.DDF are in the location set for the database by the Dictionary Location property under Directories in the server configuration settings.

68: The MicroKernel cannot perform the RI Delete Cascade operation

The MicroKernel cannot enforce the Delete Cascade rule on a file under referential integrity (RI) control because the record that the application attempted to delete has more than 16 levels of descendants. Delete records from the lower levels, and then try again to delete the record that the application was attempting to delete initially. See *Advanced Operations Guide* for more information about RI.

69: The Delete operation specified a file that is damaged

The application encountered an error while the MicroKernel was attempting to enforce the Delete Cascade rule in response to a Delete operation. This status code indicates that the related file has been damaged and must be recreated. See *Advanced Operations Guide* for more information about RI and the Delete Cascade rule.

71: There is a violation of the RI definitions

- If you attempted an Insert operation on a file under referential integrity (RI) control, a foreign key value in the record to be inserted does not have a corresponding primary key in the referenced file.

- If you are performing an Update operation, there are two possible causes for this status code:

  - You attempted to change the value of a primary key.

  - You attempted to change the value of a foreign key to a value that does not exist for the defined primary key.

- If you attempted a Delete operation, the restrict rule is enforced, and a primary key value in the record you are trying to delete references a foreign key in the referenced file. See *Advanced Operations Guide* for more information about RI.

72: The MicroKernel cannot open the RI referenced file

The referenced file cannot be found at the location specified by FILE.DDF and DBNAMES.CFG. Be sure that the referenced file is in one of the data file locations that the DBNAMES.CFG file specifies for the named database.

*   If the DBNAMES.CFG file is defined on a server, verify that the file location does not contain a drive letter.

*   If the DBNAMES.CFG file is defined for a Workgroup engine, make sure that the drive letters are the same (and map to the same locations) as specified in DBNAMES.CFG.

See *Advanced Operations Guide* for more information about referential integrity.

73: The RI definition is out of sync

The MicroKernel returns this status code for the following reasons:

*   You tried to open a data file that is bound to a MicroKernel database, and the database to which the file is bound was not found in the DBNAMES.CFG file.

*   You tried to open a data file with RI (Referential Integrity) definitions that are bound to a MicroKernel database, and the table to which the file is bound was not found in the database FILE.DDF file, or the table location and file name do not match the file location and file name as configured in the DBNAMES.CFG or FILE.DDF file.

*   You attempted to modify a bound file, and the RI definition for that file disagrees with the definition in the RELATE.DDF file.

*   You attempted an Insert, Delete, or Update operation that would change a foreign key, if the file related to this file is out of sync (an attempt to open or modify the related file would have returned this same status code).

*   You attempted to create a file with the **Replace** option, and a bound MicroKernel data file with the same name and location already exists. However, the MicroKernel detected that the existing bound file was out of sync (that is, an attempt to open the existing file would have returned this same status code).

Note: The same named database cannot exist on two servers on the same network. So, if the intent is to move the dictionaries to another server on the same network, one way would be to delete the named database on the old server before creating the same named database on the new server.

Check the RI constraints on your database. For information about how to do this, see *Zen User's Guide*.

75: The Btrieve operation has been canceled

A Btrieve operation may be canceled for various reasons, such as a deliberate choice by the user to do so, insufficient system resources, higher priority of another operation, or shutdown of the engine or the operating system.

76: There is a conflict on the referenced file

An application attempted to perform an Update, Insert, or Delete operation on a referential integrity-controlled file that references another file. The application cannot open the referenced file for RI checking because it is already open in Exclusive mode. Wait until the referenced file is closed or is opened in a mode other than Exclusive, and then retry the operation. See *Advanced Operations Guide* for more information about RI.

77: The application encountered a wait error

This status code became obsolete in MicroKernel version 7.0.

This is an informative status code. You must retry the operation yourself; the MicroKernel does not automatically retry the operation. A client-server MicroKernel returns this status code in one of the following situations:

- The application specified a wait lock bias for an operation, but another user has locked the requested resource.
- The application is currently processing a wait transaction and tried to access a file that another user has locked.

When you are using the Btrieve Requester to access the MicroKernel, the Requester waits and retries if a requested resource is locked. When a server-based application is accessing the MicroKernel and the requested resource is locked, a wait is also required. In this case, the MicroKernel is expected to perform the wait. Because this would occupy the MicroKernel and lock out other users who might be trying to release the requested resource, the MicroKernel does not perform the wait. Instead, it returns this status code, and the server-based application must retry later.

78: The MicroKernel detected a deadlock condition

The application should clear all resources by aborting, ending the transaction, or releasing all record locks before proceeding. This breaks the deadlock, allowing other applications to access the resources for which they are waiting.

79: A programming error occurred

This status code became obsolete in MicroKernel version 7.0.

There is a malfunction that the MicroKernel cannot specifically detect or from which the MicroKernel cannot recover. Retry the operation. If the error persists, there may be system corruption; try to clear the system by rebooting, and then try the operation again.

80: The MicroKernel encountered a record-level conflict

The MicroKernel did not perform the Update or Delete operation because of a record-level conflict. For example, station A reads a record, station B reads the same record and updates it, and then station A attempts to update the record. The application should reread the record prior to resending an Update or Delete operation. Alternatively, the application can employ record locks to avoid conflicts.

In key-only files, you receive this status code if the record is moved in the file b-tree after being read and before being updated or deleted. A record can move as a result of other records being inserted, updated, or deleted.

81: The MicroKernel encountered a lock error

The MicroKernel returns this status code in one of the following situations:

- The application tried to unlock a record that is locked with a multiple record lock, but the record position stored in the data buffer does not correspond to any record locked in the associated file.

- The application tried to unlock a single-record lock with a multiple-record lock or vice-versa.

82: The MicroKernel lost positioning

When performing a Get Next or Get Previous operation on a key with duplicates, the application tried to retrieve a record that was deleted or whose key value was modified by another application. Use a Get Equal or a Get Direct/Record operation to reestablish positioning. See status code 44: The specified key path is invalid for a related positioning problem.

83: The MicroKernel attempted to update or delete a record that was read outside the transaction

This status code became obsolete in MicroKernel version 7.0.

The application tried to update or delete a record within a transaction, but it did not read the record within the transaction. The application must read the record within the transaction before attempting to modify the data.

84: The record or page is locked

- An Insert, Update, or Delete operation attempted to lock an index page to insert or delete a key value. Have your application check for this status code and retry the operation if the status code is returned.

- The application tried one of the following:

  - Applied a no-wait lock on a record that is currently locked by another application

  - Tried to access a file in a no-wait transaction while another application holds one or more active record locks in that file

  - Tried to update or delete a record locked by another application.

  The application can use either of the following recovery methods:

  - Retry the operation until it is successful. This can be the simplest and quickest solution for a network with light to moderate use.

Note: Applications should limit the number of retry attempts when status 84 is received inside a concurrent transaction. Otherwise, the application might enter a deadlock situation with another transaction. If status 84 is still received after a few retries, abort the transaction and then attempt the transaction again.

  - Use the **wait** option (+100/+300) instead of the **no-wait** option (in versions that support the **wait** option).

85: The file is locked

The MicroKernel returns this status code in one of the following situations:

- While one user has a file locked in an exclusive transaction, another user attempts to lock all or part of that file.

- The workstation MicroKernel has a file open, and a client machine that has the Requester loaded tries to open the same file via the server MicroKernel. The server MicroKernel cannot open the file because it cannot obtain exclusive access. The client machine that has the Requester loaded receives this status code.

- When opened by a MicroKernel, two data files have the same file name but different extensions (for example, INVOICE.HDR and INVOICE.DET). One file is open and in Continuous Operation mode, causing the MicroKernel to generate a delta file (for example,

INVOICE.^^^). The MicroKernel returns this status code when you attempt to open the second file. For this reason, we recommend naming your files with completely different names, not just reusing the same name with different extensions.

- Without any pattern of occurrence, you may receive a status 85 when the file is closed because antivirus software opens and locks the file to scan causing the next database operation to fail. To resolve, set the antivirus software not to scan data files. Consult your antivirus application documentation for instructions on excluding files.

- A delete action was attempted on a data file that is in continuous operations. A data file put into continuous operations is locked from deletion through the Relational Engine and the MicroKernel Engine. In addition, the file is locked from any attempts to change the file structure, such as modifying keys and so forth.

86: The file table is full

An application may receive this status code if the database engine is unable to allocate memory to represent a Btrieve data file. The database engine also has a limit of 65,535 files that it can handle at the same time. The status code is also returned if that limit is reached.

One possible cause of this status code is an application that continues to open additional files without closing the data files that it has already opened. View the active files with the Monitor utility to examine whether this may be happening. See Monitoring Active Files in *Advanced Operations Guide*.

In addition, consider status code 87: The handle table is full. Status code 86 is for files and status code 87 is for handles. Multiple handles can be open for a given file. If the database engine cannot allocate memory for a Btrieve handle, then the application may receive a status 87. The handles allocated to client applications are limited by memory. Older types of handles that are allocated to DOS applications using the DOS requesters are limited 65,535.

87: The handle table is full

This status code became obsolete in Pervasive.SQL 2000i. The handle table is managed dynamically by the engine.

You have either attempted to open more handles than the MicroKernel is configured to support, or the MicroKernel attempted to open more files than the operating system allows.

- To configure your operating system to allow more handles, see the operating system documentation.

It is helpful to know the following details regarding the MicroKernel requirements for handles from the operating system. When the same file is opened multiple times, the MicroKernel uses

only one operating system handle. However, if the file is in 6.x or later format and the file is shared via MEFS mode, the MicroKernel opens a second handle for the associated .lck file.

If the file is in v5.x format, the MicroKernel might request a second handle, for the .PRE file. Also, if the file (in any format) is placed in Continuous Operation mode, the MicroKernel requests another handle for the delta file. If the file is extended, the MicroKernel requests an operating system handle for each of the extension files.

- In the Btrieve v6.15 DOS or Microsoft Windows NT 4.0 environments, you may received this status code when opening the 16th file in a DOS application running under Windows NT. There may two solutions:

  - Btrieve File handle configuration may be set incorrectly in BTI.CFG. Check BTI.CFG for file handle setting (/h: and /f:) and increase those values.

  - Check the file= setting in CONFIG.NT. This file is in the WINNT\SYSTEM32 directory and raise the values.

Note: Default value is 20.

88: The application encountered an incompatible mode error

The MicroKernel returns this status code in one of the following situations:

- If an application opens a file in Exclusive mode, all other applications receive this status code when they try to open the same file in any mode.

- If an application opens a file in any mode other than Exclusive, all other applications receive this status code when they try to open the same file in Exclusive mode.

- If an application attempts to open a read-only file in Writable mode.

- While using the MicroKernel Continuous Operation mode:

  - You attempt to remove a file from continuous operation, but the file is not in continuous operation mode.

  - You attempt to remove a file from continuous operation, but a different client placed the file into continuous operation.

  - You attempt to include two files in continuous operation that have the same name but different extensions.

  - You attempt to include a file in continuous operation, but the file is already in continuous operation.

- The files were previously in continuous operation and the server stopped responding. When you attempt to take the files out of continuous operation, a status code 88 is returned.

In the last case described above, once the server stops responding, the database engine cannot determine which files were in continuous operation.

In order for you to take the files out of continuous operation, you must open the files before trying to end continuous operation mode. When the file is reopened, the Btrieve engine detects that the continuous ops flag is set and looks for the delta file. At that point, the delta file roll-in occurs.

To initiate the roll-in of an existing delta file, the associated data file must be opened. You can open the file with a utility such as the function executor or the application that uses the file. If the application that uses the file repeatedly opens and closes the file, you are advised to open the file with the function executor. This recommendation is made because the delta roll-in is a low priority task. The roll-in was designed in this fashion so that the file can still be used while the roll-in is occurring. If the application closes the file and the roll-in has not finished, the roll-in is initiated again when the file is reopened. As a low priority task, the roll-in process may take some time. Once the engine completes the roll-in, it deletes the delta file.

89: A name error occurred

This status code became obsolete in MicroKernel version 5.0.

BSERVER was loaded before you specified the short name to which the device was redirected. You must specify all short names that you want to share with the NET SHARE command before you start BSERVER.

90: The redirected device table is full

This status code became obsolete in MicroKernel version 6.0.

The DOS Requester redirection table or server routing table is full. This occurs if you attach to additional servers or map additional drives after loading the Requester. Reload the Requester, specifying a larger value for either the **Number of File Servers (/S)** option or the **Number of Mapped Drives (/R)** option. This status code also occurs if you detach from a server and attach to a different server. Once a client has attached to a server, the Requester does not remove its name from the server routing table.

91: The application encountered a server error

Note: See the Actian knowledge base at the Actian website for new and updated articles on troubleshooting this status code.

The MicroKernel returns this status code in one of the following situations:

- The Requester cannot establish a session with the server. Either the client/server MicroKernel is not loaded or the server is not active.

- The MicroKernel has reached the maximum limit for the number of sessions it can open at one time. To avoid receiving this status code, increase the value for the **Number of Sessions** configuration option. Beginning with Pervasive.SQL 8, the MicroKernel dynamically manages the number of sessions, and it cannot be manually increased or decreased.

- An application specified a path for a file and did not include the volume name in the path.

- The MicroKernel Router has not been loaded, and the following situation has occurred: an application that uses both the MicroKernel Router and the MicroKernel to make remote calls (and which therefore includes the server and volume name when performing an Open operation) has attempted to open a remote file. Because the MicroKernel Router does not interpret the server name, the MicroKernel attempts to do so but cannot.

- A communication or network addressing problem exists in your network environment, so the MicroKernel requests never reach their destination server address. Ensure that your client and server network components are up to date and certified for your network environment.

92: The transaction table is full

This status code became obsolete in MicroKernel version 7.0.

The application exceeded the maximum number of active transactions. Use the configuration properties to specify a higher value for the **Number of Transactions** configuration option.

93: The record lock types are incompatible

The application tried to mix single-record locks (+100/+200) and multiple-record locks (+300/+400) in the same file at the same time. You must release all locks of one type before you can execute a lock of the other type.

94: The application encountered a permission error

The MicroKernel returns this status code in the following situations:

- The application tried to open or create a file in a directory without the proper privileges. The MicroKernel does not override the network privileges assigned to users.

- The designated server is in the server routing table, but your particular client is not logged into that server.

- The system data source name (DSN) on the server has an error in the pathname to the data files.

95: The session is no longer valid

Note: See the Actian knowledge base at the Actian website for new and updated articles on troubleshooting this status code.

The server MicroKernel returns this status code for one of the following reasons:

- The previously established session is no longer active due to an error at the client machine, at the server, or on the network. Verify that the client machine is still attached to the server, and then unload and reload the Btrieve Requester.

96: A communications environment error occurred

The MicroKernel returns this status code for the following reasons:

- You tried to attach to the MicroKernel on a server, but the MicroKernel client table is full. To avoid receiving this error, add more memory. This resource is managed dynamically up to available memory.

- An application that calls the MicroKernel can return this status code if the DBNAMES.CFG file contains a named database definition specifying a data location on a different server.

97: The data buffer is too small

The application either tried to read or write a record that is longer than the current allowed settings for the MicroKernel or the Btrieve Requester, as follows:

- For an Update, Insert, or Create operation, the application receives this status code if the data buffer length it specifies for the record exceeds the message buffer length.

- For a Get, Step, or Stat operation, the application receives this status code if the message buffer is shorter than the length of the data the MicroKernel would return, regardless of the data buffer length specified in the application.

- For a Get Chunk or Update Chunk operation, the total size of the retrieved or updated chunk exceeds the message buffer length.

- *DOS Requesters only:* Reload the Btrieve Requester and specify a higher value for the message buffer size. This is done using the /D parameter which is documented in *Getting Started with Zen*.

100: No cache buffers are available

This indicates that the MicroKernel has used all the cache buffers it allocated at load time.

You may encounter this status code if your application uses a large number of write operations (insert, update, and delete) in a user transaction. The current implementation of the MicroKernel Engine requires all modified pages to reside in cache until the transaction completes.

Note: On a machine with limited available memory, you may not be able to successfully complete very large transactions with thousands of write operations.

If you are a developer, you can modify your application to commit transactions more frequently, so that fewer modified pages remain in cache. The more common approach to this problem is to increase **Cache Allocation Size** in the configuration options and then reload the MicroKernel.

On Windows, the first time the database engine starts it initializes the cache allocation size to 20% of physical memory and writes that value to the Windows Registry. After that, whenever the engine starts, it reads the value from the Registry and does not recalculate the setting. If you add or remove memory from the system, you must modify the cache allocation size setting to take best advantage of the new amount of memory available.

To increase Cache Allocation:

1. Start **Zen Control Center**.

2. Expand **Engines** and find the desired engine name.

3. Right-click the engine name and select **Properties**.

4. Click **Performance Tuning**.

5. In the right hand frame, adjust the **Cache Allocation Size** by entering the amount of memory to allocate for the cache. For information, see Cache Allocation Size in *Advanced Operations Guide*.

6. Restart the engines for the new setting to take effect.

101: Insufficient operating system memory is available

This indicates that there is not enough operating system memory available to perform the requested operation. To fix this problem, perform one or more of the following:

- Go to Performance tuning in the server configuration and decrease the value for the **Cache Allocation** configuration option.

- Add memory to the server.

102: Insufficient stack space is available

This indicates that the MicroKernel has run out of stack space. To increase the amount of stack space available to your application, relink the application, setting the stack size to a higher value. The MicroKernel returns this status code only to Windows-based applications that call WBTRCALL.DLL, or applications that call the MicroKernel Engine on the local server.

103: The chunk offset is too big

The MicroKernel returns this status code in one of the following situations:

- A Get Direct/Chunk operation specified an offset beyond the end of the record, either explicitly or using the next-in-record bias to the subfunction value. Unless the MicroKernel returns this status code while processing the first chunk, the operation was partially successful. Check the data buffer length parameter immediately after the call to see how much data was retrieved (and therefore how many chunks).

- An Update Chunk operation specified an offset that is more than one byte beyond the end of the record. This status code indicates that the MicroKernel has made no changes to the record.

- An Update Chunk operation with an Append subfunction causes a record length to exceed its operating system file size limit. The MicroKernel has made no changes to the record.

104: The MicroKernel does not recognize the locale

During a Create or Create Index operation, the operating system was not able to return a collation table for the country ID and code page specified. Ensure that the application specified the locale's country ID and code page correctly and that the operating system is configured to support the country ID and code page.

105: The file cannot be created with Variable-tail Allocation Tables (VATs)

An application tried to create a file with Variable-tail Allocation Tables (VATs) but without variable-length records (a precondition for files to use VATs). This status code applies to key-only files as well as to regular data files.

106: The MicroKernel cannot perform a Get Next Chunk operation

An application called the Get Direct/Chunk operation to retrieve a chunk from a record and used the next-in-record bias on the descriptor subfunction. However, after the application established its positioning in the record (and prior to this call), the target record was deleted.

107: The application attempted to perform a chunk operation on a pre-6.0 file

An application tried to use either a Get Direct/Chunk operation or an Update Chunk operation on a file in pre-6.0 format.

109: An unknown error was encountered either creating or accessing a semaphore

The Windows platform of the workstation MicroKernel attempted an operation using incompatible versions of the DLLs. Shut down the MicroKernel and make sure that you are using the most recent versions of the DLLs.

110: The MicroKernel cannot access the archival logging configuration file

The archival logging configuration file (BLOG.CFG) contains entries for data files on the drive where you want to perform archival logging. The MicroKernel returns this status code for the following reasons:

• The MicroKernel cannot find the BLOG.CFG file. Ensure that the file is in the \BLOG directory in a real root directory of the physical drive that contains data files you want to log. (That is, do not use a mapped root directory.) If your files are on multiple volumes, you must create a \BLOG directory on each volume.

• The MicroKernel cannot open the BLOG.CFG file. Either the file is locked or it does not exist.

- The MicroKernel cannot read the BLOG.CFG file. Either the file does not use the correct format or it is corrupt. See *Advanced Operations Guide* for information about the BLOG.CFG file format.

111: The specified file name was not found in the archival logging configuration file

The MicroKernel cannot find the specified file in the BLOG.CFG file. The file must be specified in the BLOG.CFG file on the same physical drive. By default, the MicroKernel names the archival log file the same as the logged file, but with a .log extension. However, you can specify a different file name for the archival log file in the BLOG.CFG file. Ensure that the BLOG.CFG file indicates the correct file name for the archival log and ensure that the archival log file exists.

112: The specified file is in use by another client

Before the MicroKernel can perform a roll forward, the file must be in the same state it was in when it was last backed up. If another client changes the file, you must restore the file again before rolling forward.

113: The MicroKernel is unable to open the archival log for the specified file

The status code can result from different situations. In one case, the database engine cannot find the archival log file associated with the specified file. By default, the MicroKernel names the archival log file the same as the logged file, but with a .log extension. However, you can specify a different file name for the archival log file in the BLOG.CFG file. Ensure that the BLOG.CFG file indicates the correct file name for the archival log and ensure that the archival log file exists.

Another cause can be that archival logging is still turned on for a file and your are trying to roll forward a log file of the same name. Because the database engine is actively logging to the log file, you cannot use it to roll forward.

114: The archival log for the specified file is invalid

The archival log associated with the specified file is not a valid archival log file. By default, the MicroKernel names the archival log file the same as the logged file, but with a .log extension. However, you can specify a different file name for the archival log file in the BLOG.CFG file. Ensure that the BLOG.CFG file sets the correct file name for the archival log and ensure that the archival log file exists.

115: The MicroKernel cannot access the archival logging dump file

The MicroKernel cannot access the archival logging dump file for one of the following reasons:

- The file name indicated for dumping entries in an archival log is not a valid file name. Be sure this file name does not contain a volume specification. The dump file is created on the same volume as the log file.

- The caller does not have access rights to the dump file.

- The MicroKernel cannot open the file because another user has opened the file using an exclusive operating system lock.

116: The file is owned by another MicroKernel engine acting as a Gateway

The MicroKernel cannot contact the engine running on the gateway computer even though it can read the locator file. This might occur the following reasons:

- The name of the gateway computer cannot be resolved. To solve this problem, try one of the following:

  - Ensure that the gateway computer is registered with your name resolution service, such as DNS.

  - If you are not using a name resolution service, you must provide name resolution manually. Locate the file named HOSTS on your current machine. Add a line in this file associating the TCP/IP address of the gateway computer with the network name of that computer. For example, if the gateway computer is named "mycomp" and its IP address is 125.1.4.245, then you should add the following line to the file:

    ```
    125.1.4.245 mycomp
    ```

- The two computers are separated by a router so they can both see the server but cannot see each other. Try the following:

  - Use the Gateway Locator utility to identify the owner of the gateway.

  - Use Zen System Analyzer to test the network connection to that computer.

- You may have attempted to open a file with two different Workgroup engines that are mapped to the files using different share names. The MicroKernel attempts to correct this but cannot do so in all cases. Make sure each computer is mapping to the same share name.

117: Invalid content detected in Continuous Operations delta file

An operation that caused the delta file to be read during continuous operations encountered invalid content. See also Using Continuous Operations in *Advanced Operations Guide*.

Note: Invalid content in a delta file is a condition that is extremely unlikely to occur. However, if it does, operations on the data file made while backup was in progress may be lost. Transactions that occurred during the backup can be recovered if Transaction Logging or Transaction Durability is turned on for the server configuration and the data file was not opened in accelerated mode. If you require integrity of multiple data files, open all data files that were modified during backup even if their delta files are valid.

No user action is required if this status code occurs during a start of the Zen engine. That is, Zen was in continuous operations for one or more files when an outage occurred. The database engine does not attempt to roll in any invalid delta files.

In the scenario just described, the database engine logs a message reporting this status code. The Open operation that caused access to the bad delta file will still succeed even though the delta file contains invalid content. If a transaction log exists, lost transactions are rolled forward as normally occurs during an Open operation after an outage.

After the start and Open complete and any transactions are rolled forward, move the delta file with invalid content to a different directory. This allows you to perform continuous operations on the same data file again and retains the delta file with invalid content if you need technical support.

If an operation returns this status code while continuous operations is active, the operation did not successfully either read from or write to the delta file. In this case, the delta file may no longer be usable for continuous operations. Your best option is to do the following actions in the order indicated:

- Close **all** OPENs of the data file.

- Cease all further operations directed at the data file.

- End continuous operations by issuing a `butil -endbu` command (or, if you use Backup Agent, you can issue the command `pvbackup -off`).

  Note that if the delta file is damaged, the roll-in may not finish successfully when continuous operations end.

- If Transaction Logging or Transaction Durability is active for the data file, perform a single Open of the data file to roll forward the transaction log.

- If you require integrity of multiple data files, apply these same actions to all data files that were written during the backup.

- After completing these corrective actions, move the delta file with invalid content to a different directory. This allows you to perform continuous operations on the same data file again and retains the delta file with invalid content if you need technical support.

120: Maximum number of B-Tree index levels reached

This status code may result if you use a large key size for an index and small page sizes. Index keys can fill the B-Tree to the allowable depth even though the B-Tree is not completely full.

To prevent this status code, try one or both of the following:

- Rebuild the data file with a larger page size to increase the number of keys stored per page.

- Turn on index balancing to maintain a better distribution of index keys (performance decreases somewhat with index balancing on). See Index Balancing in *Advanced Operations Guide*.

121: Start of defragmentation blocked by conflicting activity

Certain conditions prevent Defragmenter from acting on a data file. Attempts to defragment the file return this status code. To diagnose and solve this problem, check for the following things:

- Was defragmentation of the file already requested? To find out, use `dbdefrag -status` *filename*.

- If Backup Agent is on, complete your backup and turn off the agent before starting defragmentation. See also Backup Agent in *Advanced Operations Guide*.

- If the engine that tried to open the file to defragment is configured for archival logging, you must turn off this feature in the Data Integrity settings of the properties for that engine.

- If the file is associated with a temporary table or is a temporary system file, it cannot be defragmented.

123: Defragmentation is not supported for certain types of files, such as key-only

In the current release, key-only files cannot be defragmented.

124: Defragmentation stopped because request to lock file access timed out with no response

If you receive this error, then the action has been aborted because it was unable to lock a file before attempting to defragment it, and the allotted time for the request expired.

125: Defragmentation stopped because validation failed. No changes have been made to the file.

File defragmentation stopped because its validation could not be completed. No changes have been made to the file, and the operation of your system is unchanged.

The incomplete validation most likely occurred because you are using Microsoft Volume Shadow Copy Service (VSS). Defragmentation is not currently supported for a server engine in an environment where VSS has performed backup operations. However, if you restart the engine, you should be able to defragment files until VSS runs again.

126: Start of defragmentation blocked by insufficient free storage space

The engine did not allow a requested defragmentation to begin because free disk space was too low. Defragmenter requires free disk space equal to the size of the file to be defragmented, plus a small amount for defragmenting operations. Files undergoing high write activity may need more space. If space becomes low on a disk volume where defragmentation occurs, the engine cancels defragmentation of files on that volume and returns this error code. The space needed to defragment a file is displayed in its analysis results.

127: Open file handles prevented completion of defragmentation.

File defragmentation stopped because its validation could not be completed. No changes have been made to the file, and the operation of your system is unchanged.

Incomplete validation most likely occurred because as defragmentation of a file nears completion, the engine inspects open file handles to determine whether the defragmented file poses a risk of record retrieval errors. If it determines a risk, then defragmentation validation fails. Defragmentation may succeed during a period of lower activity.

130: The MicroKernel ran out of system locks

This status code became obsolete in MicroKernel version 6.15. It can indicate a temporary condition in which no system locks are currently available. The following are example cases:

- A single client is performing a very large transaction that modifies thousands of records.
- Many clients are performing large transactions concurrently.

A client can receive this code whether or not it is in a transaction. In some cases, a client can simply retry the failed operation. If other clients have released system locks, the operation may succeed. If a client in a transaction receives this code, end or abort the transaction. If the

transaction is large, consider breaking it into smaller transactions. You can also use the Setup utility to lower the number of system locks devoted to explicit locking. To do so, lower the values assigned to the **Number of Locks** and/or **Number of Sessions** configuration options.

132: The file has reached its size limit

The MicroKernel returns this status code in one of the following situations:

- The file reached its maximum size. This limit depends on the file version, the page size, and the number of records per page. See File Size in *Advanced Operations Guide* for a complete discussion.

- An operation attempted to allocate more than the maximum number of page allowed for a data file.

- A data file has been in continuous operation for a long period of time, and its delta file exceeds 4 GB.

- A single data file segment has reached the operating system file size limit.

If the file uses a page size smaller than 4,096 bytes, you can rebuild the file using Rebuild utility and set the page size to 4,096 bytes, to take advantage of the larger file size limit.

133: More than 5 concurrent users attempted to access the same data file

Obsolete starting in Pervasive.SQL 7. In the Pervasive.SQL 2000i SDK for a workstation environment, you attempted to access a data file with more than five MicroKernels at the same time. The Pervasive.SQL 2000i SDK for a Workgroup environment limits the number of concurrent file users to five engines.

134: The MicroKernel cannot read the International Sorting Rule

The MicroKernel returns this status code for the following reasons:

- The ISR is not found in the collate.cfg file.

- The collate.cfg file is missing or corrupt.

- The MicroKernel cannot read the ISR from the collate.cfg file.

135: The specified ISR table is corrupt or otherwise invalid

The MicroKernel found a readable collate.cfg file, but the specific International Sorting Rule table is invalid.

136: The MicroKernel cannot find the specified Alternate Collating Sequence in the file

The MicroKernel returns this status code in the following situations:

- You tried to create an index that uses an Alternate Collating Sequence (ACS), but the MicroKernel cannot locate an ACS with the specified name in the file.

- You called a Step Next Extended, Get Next Extended, Step Previous Extended, or Get Previous Extended operation and specified an ACS name, but the MicroKernel cannot locate an ACS with the specified name in the file.

137: The operation with this access method is incompatible

This error indicates one of the following examples of types of mismatch:

- From a 13.30 or later client, your application tried to use a BTRVEX or BTRVEXID function to call a 13.20 or earlier version of a Zen database engine using one of the following operations:

  - Create (14)

  - Stat (15)

  - Get Direct/Chunk (23)

  - Unlock (27) to unlock a record with a multiple-record lock

  - Get Next Extended (36)

  - Get Previous Extended (37)

  - Step Next Extended (38)

  - Step Previous Extended (39)

  - Insert Extended (40)

- On a PSQL 13.30 or later system, your application tried to use a BTRV function to call Get Position (22) on a 13.0 or 16.0 format file of large enough size that the record count in the data buffer required more than 4 bytes.

138: The NULL indicator position is invalid

- In order to ensure accessibility to your data from all of the Zen access methods, the NULL indicator segment (NIS) must appear immediately before the data segment that the NIS indicates.

- A NIS cannot be indicated by another NIS.

139: The MicroKernel has detected an unacceptable value in the key number

Certain operations either use, or reserve the use of, the key number parameter as a subfunction number, rather than as a means to specify a file index to be used with the operation. (Note: This is also done in the GetEqual operation). This status code is returned if an application does not specify a valid subfunction number (via the key number parameter) to one of these operations:

- You issued a Begin Transaction operation with an invalid key number.

- You issued an End Transaction operation with an invalid key number.

- You issued an Abort Transaction operation with an invalid key number.

- You issued a Start Extended operation with an invalid key number.

143: The MicroKernel cannot allow unauthorized access to files in a secure MicroKernel database

The MicroKernel returns this status code in the following situations:

- You attempted to open a data file bound to a MicroKernel database that has security enabled. The MicroKernel does not allow access to such files except through the MicroKernel.

- The MicroKernel also returns this status code if you are *not* using the MicroKernel and all of the following are true:

  - You attempt to create a file with the **Replace** option.

  - A bound MicroKernel data file with the same name and location already exists.

  - The database to which the existing file is bound has security enabled.

146: Duplicate system key

The same key number was generated by two different threads generating system keys.

147: The log segment is missing

The MicroKernel cannot find a log segment that is necessary for rolling at least one file forward.

148: A roll forward error occurred

The MicroKernel encountered an error while rolling a file forward. Depending on the operating system, the MicroKernel reports an error message as follows:

- The Windows workstation with a Btrieve engine displays the message in the console message window and writes it to the event log zen.log.

- The Windows server with the Btrieve engine does not display a message, but writes it to the event log zen.log.

149: SQL Trigger

While using the Btrieve API to alter database tables or entries, the system encountered SQL restrictions placed on the database by the SQL layer.

151: Chunk Offset Too Small

You cannot insert or delete chunks within the fixed portion of a record.

160: Invalid parameters passed to MicroKernel

The MicroKernel detected a corrupt parameter in the Service Reply Block (SRB) because either:

- A network error occurred during transport or the SRB across the network, somehow corrupting the parameters in the SRB.

- A mismatch was found between legacy Scalable SQL components on your system and Zen components. This is the most likely cause for this error.

To resolve this problem, reinstall Zen to restore consistency among the installed components. If you still encounter the problem after reinstalling and restarting, contact Actian Support.

161: A key has reached a maximum limit for user count, session count, or data in use, or has changed state to expired or disabled

Several scenarios can result in this status code being returned:

- This code is returned after a temporary license has expired. The state of the key, which can be verified with the License Administration tool, changes to Expired. After a key expires, all users receive this code and are unable to access the engine. The solution is to authorize a permanent license key. Contact your vendor or Actian Support to purchase a permanent license key.

- The maximum limit allowed by your license agreement for user count, session count, or data in use has been reached. You can try closing one or more sessions or files, which may reduce the value for user count, session count, or data in use below the maximum limit. A session is defined as a client ID used by the MicroKernel Engine or a connection to the Relational

Engine. Another solution is to authorize an increase key for user count, session count, or data in use.

See also Monitoring in *Advanced Operations Guide* for details on determining the current, peak, and maximum values for user count, session count, and data in use.

• You may also receive this status code if your machine configuration changed since you authorized the Zen product. Product authorization is tied to your machine hardware configuration. After you have applied a product key on a machine, changes to certain hardware configuration items could disable the key. The state of the key, which can be verified with the License Administrator tool, changes to Disabled.

If you need to change hardware configuration, deauthorize the key first using the License Administrator utilities. Deauthorizing the key disassociates the product key from the unique hardware configuration. After you complete the hardware configuration changes, you can again authorize the product key using the License Administrator utilities.

162: The client table is full

This status code became obsolete in Pervasive.SQL 2000i. The related configuration setting is managed dynamically by the engine.

You may receive this status code due to one of the following:

• You have run out of memory.

• Your number of Active Clients has exceeded 64K.

163: The NULL indicator cannot be the last segment

The NULL indicator segment (NIS) cannot be the last segment of the key descriptor.

169: Protocol mismatch between client cache and remote engine

This status code indicates that your client software is not up-to-date with your remote database engine. You should only receive this status code if you are running V8 pre-release client software against a V8 general-release remote engine.

The solution for this issue is to uninstall your client software and install the latest V8 client.

170: Database login required

Authentication to the database failed due to a wrong or missing username.

171: Database login failed

Authentication to the database failed due to a wrong or missing password.

172: Database name not found

Specify a valid database name for the machine.

173: Already logged in

A Btrieve login request failed because the client is already logged into the specified database.

174: Logout failed

A logout can fail if you are not logged in to a database or there are remaining open file handles to the database when the logout is attempted.

175: Wrong database URI format

The URI connection string was formatted incorrectly. The first five bytes should be "btrv:".

176: File or table not specified in URI

An Open or Create was issued using a URI connection string that contained neither a file name nor a table name.

177: Table not in database

An Open was issued using a URI connection string that contained no file name, and a table name that does not exist in FILE.DDF.

178: Directory not in database

An Open was issued using a URI connection string that contained a full path name that references a directory that does not exist as one of the data directories for the database.

Add the directory to the database using the database properties dialog in the Zen Control Center (Windows) or the dbmaint command line utility (Linux).

1000 to 1999

MicroKernel Status Codes for Windows and DOS Workstations

The workstation MicroKernel engine returns the following status codes in Windows and DOS environments.

1001: The lock parameter is out of range

This status code became obsolete in MicroKernel version 7.0.

Version 6.x MicroKernels return this status code when the value specified for the **Number of Locks** configuration option is out of range. Pre-6.0 MicroKernels return this status code when the value specified for the **Multiple Locks** configuration option is out of range.

1002: A memory allocation error occurred

Make sure that the workstation has enough memory to load all the programs it requires. For workstation versions of the MicroKernel, or client requesters, the insufficient memory may apply to conventional memory, expanded memory, or both.

1003: An invalid memory size parameter was specified

This status code is returned when the value for **Cache Allocation Size** is invalid.

To adjust Cache Allocation Size:

1. Start **Zen Control Center**.

2. Expand **Engines** and find the desired engine name.

3. Right-click the engine name and select **Properties**.

4. Click **Performance Tuning**.

5. In the right-hand frame, adjust the **Cache Allocation Size** by entering the amount of memory to allocate for the cache. See Cache Allocation Size in *Advanced Operations Guide*.

6. Restart the engine for the new setting to take effect.

1006: The pre-image buffer parameter is out of range

In Pervasive.SQL 2000i, the **Extended Operation Buffer Size** setting became obsolete. This resource is managed dynamically by the MicroKernel. Its value must be between 0 and 64,000, inclusive.

The **Pre-Image Buffer Size** configuration option must be between 1 and 64, inclusive. The pre-image file is used in pre-6.0 files and by versions starting with MicroKernel 6.0 that are loaded with the **Create Files in Pre-v6.x Format** configuration option set to **Yes**. These options became obsolete in MicroKernel 7.8.

1007: The files parameter is out of range

In Pervasive.SQL 7, the **Open Files** configuration setting became obsolete. This resource is managed dynamically by the MicroKernel.

For pre-6.0 engines, the **Open Files** configuration option must be between 1 and 250, inclusive. For 6.0 and later engines, see the appropriate version documentation for valid range information.

1008: The initialization parameter is invalid

The specified configuration options contain invalid or unidentifiable values.

1009: The transaction file name parameter is invalid

This status code became obsolete in MicroKernel version 7.0.

The file name specified for the **Transaction file name** configuration option is not valid. Ensure that the transaction file name is correct.

1010: An error occurred during the access of the transaction control file

This status code became obsolete in MicroKernel version 7.0.

The MicroKernel is unable to create, open, read, or write to BTRIEVE.TRN or MicroKernel.TRN. Set the TRNFILE setting in the BTI.INI file to C:\.

1011: The compression buffer parameter is out of range

This status code became obsolete in MicroKernel version 7.0.

Ensure that **Compression Buffer Size** option is set to a valid range. Check the target server configuration settings. See *Advanced Operations Guide* for valid range information.

1012: Invalid /n: option

This status code became obsolete in MicroKernel version 6.0.

The **Maximum Number Of Files In A Transaction** configuration option is invalid. Valid values are 0 to 18; the default is 12.

1013: The task list is full

This status code became obsolete in MicroKernel version 7.0.

In the Windows environment, this status code is returned if the task entry table is full. You can change the value for the **Number of Tasks** option using the Setup utility.

In the DOS environment, this status code is returned if the BREQNT requester is used without the **/t** parameter when BTRVID calls are present in the application. Reload the requester with a non-zero value for the **/t** parameter. For information on DOS Requester parameters, see *Getting Started with Zen*.

1015: One of the pointer parameters passed to the MicroKernel is invalid

One of the pointer parameters passed into the MicroKernel is invalid. The MicroKernel checks for invalid pointers only if you put the following line under the `[BTRIEVE]` heading in your initialization file: `CHKPARMS=YES`. Otherwise, the MicroKernel performs no pointer checking and you will not receive this status code.

1016: The MicroKernel is already initialized

This status code became obsolete in MicroKernel version 6.0.

You attempted to initialize the MicroKernel when it was already initialized. To reinitialize the MicroKernel, close all files, end/abort all transactions, and issue Btrieve operation 25, using the BTRV interface before calling the initialization function.

1017: The Btrieve Requester is unable to find the resource file WBTRVRES.DLL

WBTRCALL.DLL returns this status code when it cannot find the resource file WBTRVRES.DLL. Place the WBTRVRES.DLL file in the same directory as the WBTRCALL.DLL file.

1018: The application attempted to call the MicroKernel from a Btrieve callback function

The Windows MicroKernel does not allow a task to call the MicroKernel from a Btrieve callback function. You can only use the callback function with Btrieve for Windows.

1019: The MicroKernel canceled the current Btrieve operation at the request of the application's Btrieve callback function

The MicroKernel callback function of an application returned a nonzero value, indicating that the application wants to terminate the current operation immediately. When the MicroKernel receives such a cancellation request, it attempts to terminate the currently executing operation and ceases to call the callback function for the duration of that operation. The MicroKernel may be unable to cancel the operation. However, if successful in doing so, the MicroKernel returns this status code.

1020: Btrieve Requester Interface communications error

The MicroKernel loader and requester interface returns this status code when it cannot send a message to the MicroKernel. This occurs when Windows is shutting down or when you terminate the MicroKernel using Ctrl+Alt+Delete. This is an informational status code only. No action is required. Your application continues the shutdown process. You also receive this status code when an application is running that prevents Windows from processing messages.

1021: The MicroKernel failed to initialize

- The MicroKernel could not complete its initialization tasks. Check the MicroKernel console or error log for a message that cites a problem that prevented the MicroKernel from initializing.

- The Windows server MicroKernel does not display a message but writes it to the Zen event log, the file named zen.log.

- The Win32 workstation MicroKernel displays the message in the console message window and writes it to zen.log.

Correct any problems stated in the console message or error log, then retry the operation.

1022: The MicroKernel is shutting down

The operation cannot be completed because the MicroKernel is shutting down. To correct this problem, allow the engine to completely shut down, and then restart.

2000 to 2099

Btrieve Requester Status Codes

This section lists the status codes that the Btrieve Requesters generate.

2000: Internal error

The Btrieve requester encountered an internal error. Check the Zen event log, the file named zen.log, for more information.

2001: The memory allocation is insufficient

In a DOS environment, reduce the value specified for the **/D** configuration option.

2002: Invalid option

A provided option is invalid in the current context. For example, a provided flag is unsupported or a provided integer is out of range for the called function or method.

2003: The Requester does not allow local access to the specified file

The application attempted to access a file stored on a local drive. The configuration of the MicroKernel installed at the client machine does not allow access to local files.

2007: A pointer parameter is invalid

One of the pointer parameters passed to the MicroKernel is invalid. Check the program to ensure that the pointer parameters are correct.

2008: Router cannot find engine

The MicroKernel Router cannot communicate with the 6.15 engine. This status code is only used with the MicroKernel v4.0.100.

2009: Cannot load MicroKernel Router component

The Btrieve requester cannot load the MicroKernel Router. This can occur if the DLL fails to load or fails to obtain the necessary DLL entry point.

2011: Btrieve requester resource DLL not loaded

The resource DLL is either missing or incompatible with the current version of the requester. If this happens, the MicroKernel reverts to its default settings and continues to run.

2012: The Btrieve requester encountered an operating system error

Check the Zen event log, the file named zen.log for more information.

2200 to 2299

XLT Status Codes

This section lists the XLT status codes you can receive.

2200: XLT Winsock Error

This status code is returned when a Windows Socket initialization error occurs.

2201: XLT RPC Error

This status code is returned when the MicroKernel cannot establish a Remote Procedure Call (RPC) to the Relational Engine.

2300 to 2399

Named Database Status Codes

You can receive these status codes when using the named database features of the Zen engine.

2300: No more database names are defined

No more database names are defined. If the buffer is large enough to hold multiple database names, you might receive this status code and still have one or more database names returned. The application should check iBufLen to determine the number of names returned.

2301: The database name is invalid

Not a named database. Verify you have entered a valid database name.

2302: Invalid buffer length

The size of the sending buffer is too small and needs to be increased.

2303: The database name must be unique; the specified database name already exists

While creating a database, you specified a database name that already exists in the DBNAMES.CFG file. Specify a different, unique name for the database, or remove the existing database name first.

2304: The database type is invalid

While creating a database, you specified an invalid database type. Specify a database type of either bound or unbound.

2305: The specified path for data dictionary or data file locations is invalid

The path you specified for the bound, named database is invalid or the paths you specified for the data file locations are invalid. Ensure that the entered paths are either UNC paths or local paths and then retry the operation. Paths that contain mapped drive letters are not allowed.

2306: DBNAMES.CFG could not be updated

The path you specified for the bound, named database is invalid or the paths you specified for the data file locations are invalid. Ensure that the specified paths are either UNC or local paths and then retry the operation. Paths that contain mapped drive letters are not allowed.

If returned from the Client Reporting Engine, this error indicates an attempt to create, drop, or modify a database on that system. You can perform these operations only locally on the system designated as the storage server or remotely by connecting to the storage server through ZenCC, bcfg, or other tool.

2307: Cannot open DBNAMES.CFG file

- If you are trying to access the DBNAMES.CFG file to obtain a list of database names defined for the Workgroup engine, be sure that the DBNAMES.CFG file is in your Windows directory or in the directory specified by the Database Names Directory configuration option. It should be located in the Windows system directory on 32-bit platforms. Either the location you have specified in the registry is incorrect or the registry key is corrupt. Use either of the following recovery solutions:

    - Check the location specified in the following registry key on the local machine:

      HKEY_LOCAL_MACHINE\SOFTWARE\Actian\Zen\Database Names\DBNamesDirectory

    - Check HKEY_LOCAL_MACHINE\SOFTWARE\Actian\Zen\MicroKernel Router\Local. The value should be yes for local or no for server.

- If returned from Client Reporting Engine, this error indicates that the Storage Server property has not been set or that the designated storage server does not have a Zen server installed and running.

2308: The specified RI flag is invalid

While creating a database, you specified an invalid RI setting. Specify only whether enforcement of referential integrity is on or off.

2309: The database is in use

You cannot modify the definition of a named database if another user is modifying the definition or if a user is connected to it. You also cannot connect to a named database if someone is modifying its definition.

2312: The bound database cannot share table data files

You cannot bind a data file referenced by a table in a bound, named database to another named database, or to another table in the same named database. For more information about bound databases, see *Advanced Operations Guide*.

2313: The bound database cannot share data dictionary files

The data dictionary files for a bound, named database cannot be referenced by another named database. For more information about bound databases, see *Advanced Operations Guide*.

2314: Cannot create DBNAMES.CFG file

An error occurred while attempting to generate the DBNAMES.CFG. The DBNAMES.CFG is created when the first database on the system is created. If the workstation DBNAMES.CFG file is being generated, ensure that the Windows directory in the Database Names Directory configuration option is a valid directory.

2316: Cannot create DDF files for the bound database

Zen cannot create the database files for the bound database. Ensure that the data dictionary files do not already exist at the specified location. Remove any existing data dictionary files before creating the bound, named database. For more information about bound databases, see *Advanced Operations Guide*.

2324: Data dictionary files are not bound

The data dictionary files for the specified named database are not bound, but should be. This normally indicates a situation in which the data dictionary files have been restored from a backup prior to the database being bound. Make sure that you restore your data dictionary from a backup which is consistent with the bound state of the databases. For more information about bound databases, see *Advanced Operations Guide*.

2325: Data dictionary files are already bound

The data dictionary files for the specified named database are already bound to another database. However, the other named database is not defined to the engine that is trying to bind or unbind the database. Make sure that you only reference the data dictionary files for a bound database from one engine. For more information about bound databases, see *Advanced Operations Guide*.

2326: Data dictionary files are bound, but do not need to be bound

An unbound, named database was checked. This does not indicate an invalid, or corrupted, named database, but does indicate an inconsistency between the named database definition and the actual state of the database.

This status code often indicates a situation in which the data dictionary files have been restored from a backup that was made when the database was bound. Either restore the data dictionary from a backup that is consistent with the bound state of the database, or bind and then unbind the database. The unbinding of the database removes the binding information from the data dictionary files.

2329: Data file for a table is not bound

The data file for a table in the database is not bound, but should be. This normally indicates a situation in which the data files for the database have been restored from a backup prior to the database being bound. Make sure that you restore your data from a backup that is consistent with the bound state of the database.

2330: Data file for a table is bound, but does not need to be bound

An unbound, named database was checked. This does not indicate an invalid, or corrupted, named database but does indicate an inconsistency between the named database definition and the actual state of the database. This status code often indicates a situation in which the data files for the database was bound. Either restore your data files from a backup that is consistent with the bound state of the database, or bind and then unbind the database.

The unbinding of the database removes the binding information from the data files if the binding information is no longer needed.

2331: Not allowed to change data dictionary location and change name at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2332: Not allowed to bind database and change name at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2333: Not allowed to unbind database and change name at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2334: Not allowed to create a data dictionary files and change name at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2335: Not allowed to change data locations and change name at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2336: Not allowed to change data dictionary location and bind database at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2337: Not allowed to change data dictionary location and unbind database at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2338: Not allowed to change the dictionary location and create dictionary files at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2339: Not allowed to create data dictionary files and bind database at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2340: Not allowed to create data dictionary and unbind database at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2341: Not allowed to bind database and change data locations at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2342: Not allowed to unbind database and change data locations at the same time

These two particular parameters are not allowed to be changed at the same time. Try changing each parameter separately.

2343: Named database general error

Unspecified error.

2351: Metadata version mismatch

See 7049: Cannot create DDFs due to metadata version mismatch with existing DDFs in the location provided.

3000 to 3099

MicroKernel Router Status Codes

This section lists the status codes you can receive from the MicroKernel router, which receives requests from the Btrieve requesters and routes them to the correct version of the MicroKernel.

3000: The MicroKernel router encountered a memory allocation error

The MicroKernel router could not internally allocate memory. Check the Zen event log, the file named zen.log, for more information.

3001: Local access is unavailable to the MicroKernel router

A call to the MicroKernel failed. This is most likely the result of an incorrect configuration. For example, if the MicroKernel is unavailable because of configuration settings and the file to be opened is local, then the MicroKernel router returns this status code.

3002: The MicroKernel router resource DLL is unavailable

The MicroKernel resource DLL is either missing or incompatible with the current version of the router. If this happens, the MicroKernel reverts to its default settings and continues to run. Check the Zen event log, the file named zen.log, for more information.

3003: The MicroKernel router detected an incompatible network component

The networking services component is not compatible with this version of the MicroKernel router. The most likely cause is that the Networking services DLL has been replaced by an older version. Check the Zen event log, the file named zen.log, for more information.

3004: The MicroKernel is not responding to the MicroKernel router

The MicroKernel is not responding to requests from the MicroKernel router. Verify that the MicroKernel is running.

3005: The MicroKernel router encountered an operating system error

The MicroKernel router encountered an unexpected error from the operating system, such as a shared memory failure. Check the Zen event log, the file named zen.log, for more information.

3006: The MicroKernel router detected an invalid session

The session information contained in a position block is invalid. This status code occurs for one of the following reasons:

- The application is trying to use a position block for a file that resides on an engine and for which the connection has been previously terminated via a B_STOP (25) or B_RESET (28) operation.

- The application is trying to use a position block for a file that resides on a remote server and that encountered an abnormal network error on a previous operation.

3008: Invalid configuration for MicroKernel router

This status code results from an invalid configuration. For example, if both client configuration options, **Access** > **Use Local MicroKernel Engine** and **Access** > **Use Remote MicroKernel Engine** are set to **Off**, the router has no valid path to take. If this situation occurs, set at least one of these options to **On**, depending on whether you are using a local engine, a remote engine, or both.

3009: NETinterface.DLL is not loaded

The MicroKernel router could not find NETAPI.DLL.

3012: Local engine is not accessible to the MicroKernel router

Access to the local engine is not possible because it is not loaded or could not be launched. You can receive this status code if you try to access a local file on a client and you do not have a Workgroup engine installed or if you try to access a local file on a server and the server engine is not running.

If you have only a server engine installed and your Zen event log, the file named zen.log, contains status code 3012 warning entries, perform the following steps.

To Turn Off Local Engine support (for clients and workstations only)

1. In ZenCC, expand **Local Client**.

2. Right-click **MicroKernel Router** and select **Properties**. Log in if prompted.

3. Click **Access**.

4. In the right hand frame, change the value of **Use Local MicroKernel Engine** to **Off**.

5. In the right-hand frame, change the value of **Use Remote MicroKernel Engine** to **On**. Click **OK**.

6. Restart the engines for the new settings to take effect.

3013: The remote engine is inaccessible to the MicroKernel router because the networking component is not loaded

Access to the remote engine is not possible because the MicroKernel router could not initialize the networking component. Possible causes include:

*   The client configuration option, **Access** > **Use Remote MicroKernel Engine**, is incorrectly set to **Off**. Set it to **On** to access a remote server engine.

*   The required networking component could not be found or is not compatible.

3014: The MicroKernel router cannot find an engine

The MicroKernel router could not complete the operation because it did not find an engine (local or remote) that could process the operation. Possible causes include:

*   The target network operating system is not available.

*   The target engine is not available.

*   In a Windows 3.*x* environment, you are using a shared drive name that contains a space. To resolve the condition, remove the space from the shared drive name. For example, if you connect to a server named "D Drive," change the share name to "D_Drive."

3015: The MicroKernel router encountered an initialization error

An unexpected error occurred during the initialization of the MicroKernel router. Check the Zen event log, the file named zen.log, for more information.

3016: The MicroKernel router encountered an internal error

The MicroKernel router encountered an internal error. Check the Zen event log, the file named zen.log, for more information.

3017: Data buffer of the local engine is too small

The requester has more data to send the MicroKernel than the MicroKernel buffers can handle. This status code is only relevant to an engine running locally and does not apply to client/server environments.

To avoid this error, reduce the data buffer size to no bigger than 63 KB or 64,512 bytes.

3018: The file is already closed

The MicroKernel router is shut down and is not accepting any more requests.

3019: The MicroKernel router encountered a semaphore error

A semaphore error occurred while trying to establish contact with the local engine. Check the Zen event log, the file named zen.log, for more information.

3020: An error occurred while loading the MicroKernel

You receive this status code when an error occurs while loading the MicroKernel or when access to the server and client machine shared memory objects are unavailable. Check the Zen event log, the file named zen.log, for more information.

3021: The MicroKernel router received a badly formatted data packet

The MicroKernel router rejected the response from the engine because it was badly formatted.Check the Zen event log, the file named zen.log, for more information.

3022: The MicroKernel router could not send the request to the remote engine because the specified data buffer length resulted in a data packet object that is too large

A request to the MicroKernel router specified a data buffer length that resulted in a data packet size greater than 64 KB, which is the maximum. This can occur even if the data buffer length for the request is smaller than 64 KB because the MicroKernel router adds some packet overhead as it forms the data packet. Check the Zen event log, the file named zen.log, for more information.

3030: Remote access not allowed

This code is returned if the path is remote, the client configuration setting for **Use Local MicroKernel Engine** has been set to **Off**, and either:

- the key number on the open request indicates 'local only'; OR
- the configuration setting for **Use Remote MicroKernel Engine** is set to **Off**.

3031: Linux requester cannot connect to this server

This code is returned if a Zen requester on Linux attempts to connect to a Pervasive.SQL 2000 server that has Service Pack 2a or earlier or to a Pervasive.SQL V8 server without Service Pack 1.

- To use the Linux requester to connect to a Pervasive.SQL 2000 server, you must have a special update that is available from Actian Support.

- To use the Linux requester to connect to a Pervasive.SQL V8 server, you must have Service Pack 1 or later.

3032: Failed to initialize shared memory to local engine

This status code results if a second user attempts to access another user's database engine through the MicroKernel Engine. The application is unable to connect to the local engine. Possibly a database engine has been started by another user on the machine in a non-elevated mode. If so, other users will not be able to connect to that engine.

One situation in which this status code may result is if a user starts the Workgroup Engine or Cache Engine in a Terminal Services session or by switching users through fast-user switching. Other users on the system cannot access that engine nor can they start their own copy of the engine. To allow multiple users access to a Workgroup Engine or Cache Engine in a Terminal Services session or through fast-user switching, start that engine as a service instead of as an executable.

3100 to 3199

Network Services Layer Status Codes

The following status codes originate from the Zen network services layer.

3103: Server name not found by Zen network services layer

The search for a target server name was unable to resolve an address after searching named pipes and DNS. Some possible causes include:

- *For Windows Platforms*
  - The MicroKernel engine not running.
  - *Server only*: Named pipes are used in these two operating systems to resolve server names. The networking at the operating system level was unable to find the target named pipe.

3104: The Zen network services layer encountered a permission error

For Windows NT only: Permission to access the target named pipe is denied. If you receive this status code:

- Verify that you have access to the inter-process communication mechanism.
- Ensure that your passwords are identical if you have the same user name on two systems.

3105: No available transport protocol for the Zen network services layer

No transport protocol that is common to both the target server engine and clients is available. Check the Supported protocols setting within the Communication protocols option for both the client and server. For more information on Communication protocols, see *Advanced Operations Guide*.

3106: The Zen network services layer encountered a connection failure

The Zen network services layer was able to establish a transport connection at the client side, but the connection attempt at the target side failed. Some possible causes are:

- The MicroKernel is not running on the server.
- The network is overloaded.

- The connection path is invalid.

- You have more than one mapped drive to the same server.

- You are trying to access a server engine on a Windows 32-bit server, and the server engine **Accept Remote Requests** setting is set to **Off**. You must turn this setting on. See To set the properties in ZenCC for a local client in *Advanced Operations Guide*. Click the **Access** category in the Properties tree.

Check the Zen event log, the file named zen.log, for more information if you receive this status code.

3107: The Zen network services layer is out of memory

The Zen network services layer has insufficient memory to continue. Verify that you are not in a low memory condition.

3108: The Zen network services layer detected an invalid session

The application attempted to use a network session that was not recognized by the Zen network services layer. If the error persists, contact Actian Support.

3110: The network layer is not connected

The application attempted to use a network connection that was no longer active. This happens when the session with the Zen network services layer is still valid, but was dropped by the network. Stop and restart the application.

3111: Failure during send to the target server

The Zen network services layer attempted to send an application request to the target server and encountered a network specific error from the target. Check the Zen event log, the file named zen.log, for more information.

Note: If there is a problem with Auto Reconnect, a further status code 3131 will be issued.

3112: Failure during receive from the target server

The Zen network services layer attempted to receive data from the target server and encountered a network specific error. Check the Zen event log, the file named zen.log, for more information.

Note: If there is a problem with Auto Reconnect, a further status code 3131 will be issued.

3114: The routing table of the Zen network services layer is full

The Zen network services layer server routing table is full. This table normally grows dynamically as needed. Verify that you are not in a low memory condition.

3115: Zen network services layer encountered a transport failure

The Zen network services layer encountered a socket error while creating the local transport endpoint on the client side. Check the Zen event log, the file named zen.log, for more information.

3116: Zen network services layer encountered a buffer mismatch

When a Zen Client cache engine is running under high load, the Zen network services layer may return this status code to indicate a mismatch in server and client requester data buffers. This error does not currently have an entry in the Zen event log, the file named zen.log. Status code 100 may also be associated with this behavior.

If this error is seen in when the client cache engine is running, make sure that you are using client components from PSQL v12 SP1 Update 2, PSQL v13, or later.

3119: No authentication context is available

NSL was unable to return the access context on the specified session for the supplied object. There are several reasons why NSL could not obtain the context and it varies depending on the transport type.

- NamePipe – It is possible that NSL was able to locate the server via DNS, but when it tried to make a Named Pipes call to request authentication of the client, the Named Pipes communications failed. Ensure that Named Pipes is configured correctly for the network for both the client and server. See your operating system documentation for information on Named Pipes configuration.

- Windows – You use stored client credentials to authenticate to the server, and there are no credentials stored and value for the Prompt for Client Credentials setting is Off.

  To resolve this condition, use the configuration properties to change the Prompt for Client Credentials setting to On, or use the pvnetpass utility to store a valid set of client credentials for the server. See *Advanced Operations Guide* for more information about security. See *Zen User's Guide* for more information about the pvnetpass utility.

- Linux – You must configure a user name and password for all remote server data access. To resolve this condition, use the pvnetpass utility to specify a user name and password for the given server, or create a default user name and password for the server using pvnetpass. See

Advanced Operations Guide for more information about security. See *Zen User's Guide* for more information about the pvnetpass utility.

3124: Zen network services layer task table is full

For each user of the Network Services Layer, a task entry is created. If the maximum number of tasks has already been reached (512 and not configurable), this error is returned. Close any applications using Zen that are no longer needed.

3126: The Zen network services layer was unable to resolve the given file name into a valid path

Check that the given file name is a valid file format and path.

3131: Zen network services layer encountered an error while reconnecting

This status code means that Auto Reconnect was unsuccessful. The following messages will appear in zen.log:

- "3131: Reconnect failed. Client and Server Message IDs out of synchronization." The client and server did not agree on the current context. Because the integrity of the last request cannot be verified, the connection was terminated.

- "3131: Reconnect not attempted, Auto Reconnect not enabled on either client or server." In this case, either the client, server or both has Auto Reconnect disabled or your server version does not support Auto Reconnect. The reconnection attempt will not be made.

- "3131: Reconnection attempt timed out." This means that the client was unable to obtain a new connection to the server within the Auto Reconnect timeout period.

- "3131: Reconnection negotiations failed after reestablishing network connection." This means that the client was successful in making a new network connection to the server, but communications failed during the Zen Auto Reconnect negotiations.

Note: A zen.log entry of "0: Reconnect after send/receive failure was successful" indicates a successful connection.

3132: Unsupported Function

This error is returned when the Scalable SQL interface attempts to communicate with the Pervasive.SQL 8 network services layer.

The legacy Scalable SQL Engine is not supported in any combination with Pervasive.SQL 8 components. If you receive this error, search for and uninstall Scalable SQL (or Pervasive.SQL 7), and or all if its components.

4000 to 4099

Database Utilities Status Codes

This section lists the status codes you can receive when using the Database Utilities (DBU).

4083: Component not loaded

If you receive this status code while attempting to start the Zen engine service, you are missing a key file. To resolve this problem, uninstall Zen and reinstall it.

Note: You may get more information about the situation that caused this error by setting the environment variable, PVSW_DISP_LOAD_ERRS=AIF, and running the application again. This enables the Services DLL to display on-screen module load errors. However, this environment variable should only be set to diagnose module load errors. In all other cases, it should not be set.

4086: An internal error occurred. Utilities Requester receive size too small. Verify that the correct components are loaded

An operation provided a buffer that was not large enough to receive the requested information.

5000 to 5999

Encryption Status Codes

This section lists status codes you can receive when using wire encryption or enabling database security. In *Advanced Operations Guide*, see Zen Security for more information about these topics.

5000: Client requires encryption

Your client configuration setting for **Wire Encryption** is set to **Always**, and the server to which you are trying to connect either has a Wire Encryption setting of **Never**, or the server has a version of less than 8.50 which does not support the Wire Encryption feature.

To resolve this condition, either change the **Wire Encryption** setting of the client to **If Needed** or change the **Wire Encryption** setting of the server to **Always** or **If Needed**.

To change the Wire Encryption setting:

- Use Zen Control Center. For information, see To set the properties in ZenCC for a local client in *Advanced Operations Guide*.

- You can also use the **bcfg** command line tool. For information, see Configuration Using Bcfg in *Advanced Operations Guide*.

Note: On any one machine, the Zen server and client share a single Wire Encryption setting.

5001: Server requires encryption

Your client configuration setting for **Wire Encryption** is set to **Never**, and the server to which you are trying to connect has a Wire Encryption setting of **Always**.

To resolve this condition, change the Wire Encryption setting of the client to **If Needed** or **Always**.

To change the Wire Encryption setting:

- Use Zen Control Center as described under To set the properties in ZenCC for a local client in *Advanced Operations Guide*.

- You can also use the **bcfg** command line tool as described under Configuration Using Bcfg in *Advanced Operations Guide*.

6000 to 6050

Data Dictionary Status Codes

This section lists the status codes that pertain to the data dictionary files. These codes often relate to errors involving referential integrity.

6002: Invalid Column

The column name cannot be used. The name may contain invalid characters or the name may be a duplicate name. See Naming Conventions in *Zen Programmer's Guide*.

6003: Foreign Key Not Found

The column to which the foreign key is to be associated does not exist in the primary table.

6005: Column Not Nullable

This column cannot be made null. Certain data types, such as identity and small identity, cannot be null. Check the data type of the column. See Data Types in *SQL Engine Reference* for a list of the Zen data types.

6006: Invalid Data Type

The number for the data type is not within the valid ranges. The current range is 0 to 30. See Data Types in *SQL Engine Reference* for a list of the Zen data types.

6007: Invalid Index Number

The index number is less than zero. Negative numbers are not allowed as index numbers.

6008: Too Many Segments

The number of index segments is greater than the maximum allowed. Note that the maximum number of *keys* is 119 for all file versions. The number of *key segments* can vary but must be within the limits shown by the following table.

The number of index segments that you may use depends on the file page size.

Page Size (bytes)	Maximum Key Segments by File Version			
	8.x and earlier	9.0	9.5	13.0, 16.0
512	8	8	Rounded up[2]	Rounded up[2]
1024	23	23	97	Rounded up[2]
1536	24	24	Rounded up[2]	Rounded up[2]
2048	54	54	97	Rounded up[2]
2560	54	54	Rounded up[2]	Rounded up[2]
3072	54	54	Rounded up[2]	Rounded up[2]
3584	54	54	Rounded up[2]	Rounded up[2]
4096	119	119	204[3]	183[3]
8192	n/a[1]	119	420[3]	378[3]
16384	n/a[1]	n/a[1]	420[3]	378[3]

[1]"n/a" stands for "not applicable."

[2]"Rounded up" means that the page size is rounded up to the next size supported by the file version. For example, 512 is rounded up to 1024, 2560 is rounded up to 4096, and so forth.

[3]A 9.5 format or later file can have more than 119 segments, but the number of indexes is limited to 119.

See status codes 26: The number of keys specified is invalid and 29: The key length is invalid for related information about index segments and the MicroKernel Engine.

See also Choosing a Page Size and Segmentation in *Zen Programmer's Guide*.

6009: Index Name Duplicate

The index name is already being used a column. Use a unique index name. See Naming Conventions in *Zen Programmer's Guide*.

7000 to 7050

Distributed Tuning Interface Status Codes

This section lists the status codes you can receive when using the Distributed Tuning Interface. See *Distributed Tuning Interface Guide* for more information on this interface.

7001: Invalid connection handle specified

Specify a valid connection handle with the API call.

7002: NULL pointer specified

Specify a valid pointer with the API call.

7003: Buffer was too small

Increase the buffer size. Some APIs report the required size in an out parameter.

7004: A general failure occurred

This error can be returned in the following situations:

- You do not have the necessary permissions to perform the operation.
- The engine on the target machine is not started.
- The engine on the target machine is not accessible from the application location, possibly because a firewall is blocking port 3351 used by Btrieve and DTI. In this case, opening firewall access to this port resolves the issue.

7005: Invalid data type specified

Specify a valid data type for the operation.

7006: Setting value is out of range

Check the valid range for the setting in the configuration reference topic in *Advanced Operations Guide*.

7007: At least one selection item is invalid

Check the list of selection items to ensure all are valid selections. You can find the valid values in the configuration reference topic in *Advanced Operations Guide*.

7008: Invalid sequence number

Specify a valid sequence number for the operation.

7009: Data on open files is not available

Data related to open files is not currently available.

7010: Client ID is invalid

The client ID needed for this operation is invalid. Specify a valid client ID.

7011: Insufficient access rights

You have insufficient access rights to perform the operation requested. Many DTI functions require administrative rights on the server. See *Distributed Tuning Interface Guide* for more information on rights required for DTI operations.

7012: Named database already exists

The named database you are trying to add already exists. Specify a unique name for the named database.

7013: Named database does not exist

The requested named database does not exist. Specify a valid named database.

7014: DTI not initialized

Before you can use DTI functions, you must first initialize DTI by calling the `PvStart()` function. Then you can invoke DTI operations. When finished, use `PvStop()` to terminate the DTI session. See *Distributed Tuning Interface Guide* for more information.

7015: File not open

The operation you requested requires an open file.

7016: Dictionary files already exist

Dictionary files for the specified database already exist.

7017: Dictionary path in use

Another process has the dictionary files in use. Close all other running applications and retry the operation.

7018: Invalid DSN name

The DSN you are trying to create contains invalid characters or is too long. DSN names cannot be longer than 20 characters and cannot contain the following symbols: `[]{}() ?*=!@,;`

7019: DSN already exists

The DSN you are trying to create already exists. Specify a different name for the DSN.

7020: Specified DSN does not exist

The DSN you are trying to locate does not exist. Specify a valid DSN name.

7021: Invalid open mode for DSN

Specify a valid open mode. For information, see DSN Open Mode in *ODBC Guide*.

7022: Component not loaded

A component needed for DTI is not loaded. Try restarting your Zen engines.

7023: The database files cannot be deleted because they are shared with another database

You receive this status when trying to delete a database that shares DDF files with another database.

7024: Invalid Btrieve Security Policy

When creating a database, an invalid Btrieve Security Policy was specified. Specify one of the following:

- PSQL_DB_POLICY_CLASSIC

- PSQL_DB_POLICY_MIXED
- PSQL_DB_POLICY_DBSEC

7025: Server name not found

The server you specified cannot be found. Check the server name and try again.

7026: Requester not loaded

The connection could not be established because the client requester is not loaded.

7027: Server table full

The connection could not be established because the internal server name table is full.

7028: Client connections limit exceeded

The number of client connections for DTI is limited to 100.

The connection could not be established because the limit on client connections has been reached.

7029: Permissions Error

The connection could not be established because DTI encountered a permissions error. Check your username and password and try again.

7030: Out of memory

The connection could not be established due to lack of memory resources.

7031: No transport is available

No remote connection could be established. Check your network configuration.

7032: Connection failure

The connection could not be established due to an unknown reason.

7033: Connection was lost

The remote connection to the server was lost. If this error persists, check your network configuration.

7034: Database name is too long

The database name you specified exceeds the length limit. In *Advanced Operations Guide*, see Zen Databases for information on valid database names.

7035: Insufficient number of data paths

When copying a database, you specified a smaller number of data paths than the original database contained.

7036: File name already exists

The file name you specified already exists. Choose a unique file name for the operation.

7037: Password is invalid

The password you specified for the operation is not valid.

7038: Destination data path is invalid

The path specified as the destination could not be found. Verify the path you provided to the API.

7039: Dictionary path is invalid

The path specified for dictionaries could not be found. Verify the path you provided to the API.

On Linux, this error can result if you try to create a database with Zen Control Center and the owner of the directory is not zen-svc. Ensure that the owner of the directory where you want to create the database is zen-svc. Use the chown command to change ownership. For example, `chown zen-svc` *directoryname*.

7040: Filter option is invalid

A parameter passed to DTI was invalid. See the DTI documentation in *Distributed Tuning Interface Guide* for the valid options.

7041: Cannot perform operation because database entries in FILE.DDF contain absolute paths

You cannot perform the requested function because the database contains absolute paths in FILE.DDF. To resolve this issue, remove the absolute paths from the database and try again.

7042: Bound database requires data dictionary files

The creation of a bound database requires data dictionary files (DDFs). For a bound database, ensure that the CREATE DATABASE statement or the Create New Database wizard also specifies the creation of dictionary files.

7043: Invalid character sent by client

One or more characters sent by the client in a DTI function argument string are invalid and cannot be translated to the server's encoding. Verify the function arguments.

7044: Invalid character received by client

One or more characters received from the server in a DTI function argument string are invalid and cannot be translated to the client's operating system encoding. It may be necessary to use a different client machine.

7045: Internal buffer too small

The internal buffer is too small to process a DTI argument. One possible workaround is to use shorter arguments.

7046: Invalid encoding translation option

The translation option in the DTI function PvCreateDSN2() or PvModifyDSN2() specifies an invalid encoding. For the valid options, see the *translate* argument for these functions in *Distributed Tuning Interface Guide*.

7047: Invalid code page for database

The code page specified for the database is invalid (not supported by the database engine). Verify the code page and use one supported by the database engine. The code pages supported can be viewed from the Create Database dialog in Zen Control Center. See New Database GUI Reference in *Zen User's Guide*.

7048: Invalid operation

An API is being used that is not supported for this platform.

7049: Cannot create DDFs due to metadata version mismatch with existing DDFs in the location provided

This error occurs when you try to create a new database whose metadata version differs from that of an existing database in the directory location you have chosen. The workaround is to make the metadata versions the same or to choose a different location.

7064 to 7140

License Administrator Status Codes

This section lists the status codes you can receive when using the License Administrator.

7064: No license obtained for the product

A session tried to release a license (for user count, session count, or data in use) but the session either had not acquired a license from the server or had acquired a license for a different product.

7065: A product has not been obtained

An application attempted to obtain the license (for user count, session count, or data in use) for a product, but no license has been authorized. Ensure that a license has been authorized for the product before attempting to obtain the license information.

7101: Invalid character in the license string

The license key you attempted to authorize contains one or more invalid characters. All alphanumeric characters (upper or lower case) are permitted except for "i" and "o." Lower case letters are automatically converted to upper case.

Correct any invalid characters in the license key and authorize the key again.

7102: Illegal license type is defined

The license key an application attempted to authorize is not valid because the Product Type is invalid. The permissible types are permanent and temporary, and increase licenses for user count, session count, or data in use.

Ensure that you have a valid license key issued by Actian Corporation or by your application vendor if the database engine is embedded in an application.

7108: License key length is too long

The length of the license key you attempted to authorize exceeds the maximum length allowed for a key (30 characters). Ensure that the license key contains 30 characters.

7109: No such license exists

The license key you are trying to deauthorize does not exist. The license key may have already been deauthorized.

If you are using the License Administrator GUI to deauthorize the key, press **F5** to redisplay the list of authorized licenses. Check the refreshed list for the license key you were trying to deauthorize. If the license key still appears to exist, exit, then restart License Administrator.

7110: Only temporary licenses are installed on the system and all of them have expired

All of the installed licenses are temporary ones that have expired. The values for user count, session count, or data in use no longer apply. You need to install a valid license, temporary or permanent, to provide new values for user count, session count, or data in use.

7111: Temporary licenses cannot be deauthorized. The license becomes invalid after its expiration date.

You have attempted to deauthorize a temporary license. Temporary licenses cannot be deauthorized; they become invalid after their expiration date. Verify that the license you want to deauthorize is a type that can be removed.

7112: License is already installed

The license key you are attempting to authorize has already been authorized. You cannot reauthorize a license once it has been authorized unless you deauthorize it first. Temporary licenses cannot be deauthorized.

If you are using the License Administrator GUI to authorize the license, press F5 to redisplay the list of licenses. Check the refreshed list for the license you were trying to authorize. If the license still does not appear in the list, exit, then restart License Administrator.

7113: Invalid license key. Verify the provided key

The license key you attempted to authorize is not a valid license. Ensure that you have a valid license key issued by Actian Corporation or by your application vendor if the database engine is embedded in an application.

This status code is also displayed if your key is for a specific platform that does not match the platform on which you are attempting to authorize the license. For example, if your license key is

for "Win64," you cannot authorize the license for a Windows 32-bit operating system or on a Linux platform.

If you are using the License Administrator GUI to authorize the key, repaste or retype the key in the Key field, then click the button to authorize the key.

Special consideration for telephone authorization

If your machine configuration changes between the generating of the authorization request code and the receipt of your authorization key data string, then this status code can indicate that the authorization key data string no longer matches your machine, even though the product key itself is valid. In this case, you have two options:

- Return your machine to its previous configuration, then attempt to authorize your license key again.

    or

- Follow these steps:

1. Rerun the Phone Authorization Wizard or the Command Line Phone Authorization Utility.

2. Contact Actian Support with your original product key and the resulting new authorization request code.

3. Obtain a new authorization key data string for your changed machine configuration.

4. Use the new authorization key data string with your license key.

7115: Invalid product ID

The license key you attempted to authorize is not a valid license because the product name in the key is not recognized. On possibility is that the key is for a newer version of Zen than the one you are trying to authorize.

7116: Buffer overflow

The buffer assigned for the DTI function or DTO method is too small. Increase the size of the buffer. See the applicable function in *Distributed Tuning Interface Guide* or to the applicable method in *Distributed Tuning Objects Guide*.

7117: License key is too long

The length of the license key you attempted to authorize exceeds the maximum length allowed for a key (30 characters). Ensure that the license key contains 30 characters.

7118: The server is not running. Unable to show, authorize, or deauthorize a license. Verify that the server is running and that network communications are functioning.

License Administrator is unable to connect to the remote server. This could indicate the following:

- You may have started the License Administrator on a client where a database engine is not installed. Click **OK** to establish a connection to a server.

- The server is not running. If needed, follow the steps under Verifying Database Engine is Running in *Getting Started with Zen*.

- Network communications are preventing connection to the server. Use the **ping** command to the server to verify that network communications are working.

7119: The local server is not running. Unable to show, authorize, or deauthorize a license.

License Administrator is unable to connect to the database engine on the local machine where License Administrator is running. Ensure that a database engine is installed and running on the local machine. Follow the steps in Verifying Database Engine is Running in *Getting Started with Zen*.

7120: The license cannot be deauthorized

The license or licenses you are attempting to deauthorize cannot be deauthorized. Temporary licenses cannot be deauthorized. They become invalid after their expiration date.

Verify that the license is a type that can be deauthorized.

7122: Your trial license has expired

The temporary trial license you are attempting to authorize has expired, and one of the following is true:

- No other licenses are authorized.

- Other licenses are authorized but no longer valid. All installed temporary licenses, for example, have expired.

The Zen product cannot be installed without a valid license. Click **Continue** if you have a valid license to authorize. If you need an additional trial period, you can request a new trial license from Actian Corporation.

7124: An increase key for user count, session count, or data in use must have a vendor ID that matches the vendor ID of an authorized permanent key

An authorized permanent key is required before an increase key can be authorized. The software vendor ID number for an increase key must match the vendor ID number for an authorized permanent key. Increase keys obtained from Actian Corporation are universal. That is, they are compatible with any permanent key from any vendor.

Ensure that you have a valid permanent key authorized before authorizing an increase key. Also ensure that the vendor ID numbers match if the increase key was obtained from a vendor, or use an increase key obtained from Actian Corporation. Vendor ID numbers can be verified with the License Administrator tool. See License Administration in *Zen User's Guide*.

7125: An active permanent license already exists

The machine on which you are attempting to authorize a permanent license key already contains a permanent license key from the same vendor in the "active" state. You may not authorize more than one active permanent license key from the same vendor.

If a permanent license key has already been authorized from a vendor and is active, you may only authorize an increase for user count, session count, or data in use. Deauthorize the existing license key and then authorize the new permanent license key.

You may authorize another permanent key from the same vendor to the same machine if the existing permanent key is in a "failed validation" or a "disabled" state. That is, the existing permanent key is **not** active. If another permanent key is authorized while an existing key is in the "failed validation" state, the existing key changes state to "disabled." The other permanent key then becomes the active key.

7126: Cannot increase the value beyond the maximum limit for user count, session count, or data in use

The license increase you are attempting to authorize would increase the value beyond the maximum limit for user count, session count, or data in use. You cannot increase the value beyond the maximum limit allowed by your license agreement.

7127: This key or a related key requires deauthorization. This version of the client cannot deauthorize a key.

The key or a related key you are trying to deauthorize requires that you have PSQL v10.13 or later installed. Upgrade to PSQL v10.13 or later and use the License Administrator utility to deauthorize the key.

7130: The Zen product version for this key does not match the installed Zen engine

The Zen product version associated with the key you are trying to authorize does not match the Zen product currently installed.

Make sure that the key you are using is correct and that you have the correct Zen product installed.

7131: The OS platform for this key does not match the installed Zen engine

The operating system associated with the key you are trying to authorize does not match the Zen product currently installed.

Make sure that the key you are using is correct and that you have the correct Zen product installed.

7132: The Zen engine type for this key does not match the installed Zen engine

The type of Zen database engine indicated by the key you are using to authorize does not match the engine installed.

7133: An associated UCI key is preventing the deauthorization of the permanent key. The UCI key may already be in the failed or disabled state, or it may be set to transition into the failed state the next time it is validated. Repair the UCI key and try again to deauthorize the permanent key.

An authorized permanent key cannot be deauthorized because of its associated user count increase key. The user count increase key is in a Failed Validation or Disabled state or will move into a Failed Validation state during the next validation.

First, determine why there is a problem with the UCI key. Fix the problem and validate the UCI key. After that, reattempt the deauthorization of the authorized permanent key.

7140: The operation is not supported on this version of the engine.

Some Zen editions carry restrictions for certain features, such as licensing. For more information, contact Actian Support.

7200 to 7499

Authorization Status Codes

This section lists the status codes you can receive when authorizing your product.

7201: An error in one of the authorization libraries prevents further processing

One of the authorization libraries has produced an error that prevents further processing.

Try restarting the services or reinstalling Zen and try authorization again. If this error persists, check the log file to determine the library name reported and contact Actian Support.

7212: Invalid product key for authorization

The product key specified is invalid. Type, or paste, a valid product key and try to authorize the key again.

7213: Product key does not pass checksum validation for authorization

The product key appears to be a valid key, but failed to pass a checksum validation. A common reason is that the key was typed incorrectly. Another possibility is that a transmission error prevented the checksum validation.

Ensure that a valid product key is specified and try again to authorize the key.

7215: Unable to determine machine ID. Verify you are logged on with administrator permissions and retry.

The system encountered an error while trying to calculate the machine ID for the current session.

Ensure that you are logged on as an Administrator with full access rights and try authorizing or deauthorizing the key again. If you are using Windows Vista or later Windows operating systems, turn off UAC. If you are authorizing or deauthorizing the key remotely, try the operation locally.

7218: Debug entry logged pertaining to acquiring the machine configuration

The system encountered difficulty while trying to acquire the machine configuration and has logged information to the Zen logging repositories.

Ensure that you are logged on to the operating system as an Administrator with full access rights and try again to authorize or deauthorize the key. If you are using Windows Vista or later operating system, turn off UAC. If you are trying to authorize or deauthorize a key remotely, try the operation locally.

If you encounter this situation in a Windows operating system, ensure that WMI is working properly because it is the utility that acquires the machine configuration.

If you encounter this situation on a Linux operating system, ensure that the dmidecode utility is installed on the system and restart the Zen daemon.

7221: Authorizing or deauthorizing a key requires database engine to be running

The Zen database engine must be running before you can authorize or deauthorize a key. See Starting and Stopping the Database Engine in *Zen User's Guide* for details.

7222: DTI call could not be completed or there is a problem connecting to the engine

The authorization call to DTI could not be completed or there is a problem connecting to the engine.

Try restarting the engine or services and try authorization again. If the problem persists, try reinstalling Zen and try authorization again.

7223: DTI returned invalid license string

The string returned during authorization was empty or invalid.

Make sure that the database engine is running and try authorization again.

7224: User lacks the appropriate rights to authorize or deauthorize a key

The target engine tests for appropriate permissions prior to authorizing or deauthorizing a key. Target engine testing failed due to inappropriate permissions.

Ensure that you are logged on as a user with Administrator permissions and try again to authorize or deauthorize the key. If you are using Windows Vista or later Windows operating systems, temporarily turn off UAC.

If authorizing on Terminal Services, ensure that the setting for "Restrict Administrative Functions from a WTS Client" is off. In ZenCC, open the properties for the MicroKernel Router under Local Client. On the Properties dialog, ensure that the option "Restrict Administrative Functions from a WTS Client" is *not* selected.

This error can also be seen if you are running the Zen Workgroup engine as an application on Windows Vista or later Windows operating systems and not running as an Administrator. Try closing the Workgroup engine and then restarting zenengnapp.exe using the **Run as administrator** option. Another option is to uninstall the Workgroup engine and reinstall it to run as a service.

7226: Deauthorizing a key requires an authorized key

Deauthorizing cannot occur because no key is available. A product key must be authorized before it can be deauthorized. Ensure that the product key you want to deauthorized has been authorized. The key may have been removed without first being deleted.

With License Administrator, verify the key that you want to deauthorize. See To Refresh the License Information List and To Display License Information, both in *Zen User's Guide*. Try the deauthorization again and specify a valid key.

7235: Product authorization is not supported on this version of Zen

This version of Zen does not support authorization. Try authorization from a machine running PSQL v10.13 or later.

7239: Internet connection cannot access authorization server

The Internet connection cannot access the authorization server to obtain data needed for key validation.

Possible causes include, but are not limited to, the following:

- A network problem is preventing connection to the authorization server.

- In your local system registry, authorization server information may be corrupt or missing.

- Security issues, such as firewall protection, are preventing connection to the authorization server. Configure your firewall or proxy server to allow access to elspv.actian.com and bkpelspv.actian.com. Additional details can be found in the community knowledge base by searching for "firewall proxy server" and then in the search results finding the article "How to Check or Detect Licensing Issues."

- The authorization server is down. To confirm, open elspv.actian.com in a browser. If the server is running, it returns a message resembling "ELS WEB SITE AMS11 version 1.5.3 Build 73 - 13.0.0.1."

If these explanations and solutions do not address your problem, contact Actian Support.

7241: Authorization service support files not found

This status code applies only to Linux. The service files that process the Internet authorization and deauthorization processes were not found.

Verify that the web service file elsdid is located in /usr/local/actianzen/bin and that the file has execution permissions. Try restarting the services or reinstalling Zen and attempting authorization again.

7252: Authorization key is invalid for the target machine

The authorization key data entered is not valid for the target machine. The key may have been malformed during the offline authorization process.

Try entering the authorization key data again or try offline authorization again.

7254: Key cannot be authorized because it contains invalid license data. Contact your product key vendor.

A failure occurred during authorization of the key. Contact your product key vendor for assistance with troubleshooting.

7260: The offline data does not pass validation

The offline data failed to pass an internal checksum validation. A transmission error may have prevented the checksum validation. Try performing offline authorization again.

7261: Error encountered while saving the offline authorization request data file

An internal error occurred while saving the offline file of authorization request data. Make sure that the directory has appropriate permissions and the target folder exists. Try saving the offline file again.

7262: Error encountered while loading the offline authorization key data file

An internal error occurred while loading the offline file of authorization key data. Make sure that the directory has appropriate permissions and the target folder exists. Try loading the offline file again.

7264: Product key is invalid

The product key entered is invalid. Type or paste a valid product key and try again.

7265: Authorization of the authorization key data must be on the same machine where the authorization request data was generated

The target machine used for offline authorization is invalid. Make sure you are using the same machine for offline authorization as the machine on which you created the authorization request data file.

This status code can also be seen when the offline authorization utility licgetauth.exe is run on a Vista or later Windows OS machine without administrator privileges. To avoid this problem, run the utility from a command prompt window using the Run as an Administrator option.

7267: This stage of the offline authorization is invalid or inconsistent with the requested offline operation

The offline file is not consistent with the offline operation. Try starting the offline authorization from the beginning.

7268: Offline authorization must be performed locally

Offline authorization cannot be performed remotely. Perform offline authorization using a machine with a local Internet connection.

7269: An internal error occurred while trying to process the offline operation on the local machine

During offline authorization an internal error prevented processing. Try offline authorization again.

7300: Local licensing component incompatible with remote licensing server

The licensing component on the local machine is incompatible with the remote licensing server. An older version of the licensing component on the local machine can result in this status code being returned. Contact the product key vendor for a compatible version of the local licensing component.

7305: Product key not found in authorization database

The product key appears to be valid and has a valid checksum but cannot be found in the authorization database on the remote authorization server. Ensure that the product key is valid. If it is, and this problem persists, contact Actian Support.

7306: Product key is not in a valid state

The system is unable to decrypt the key because the key state is invalid. This error can occur if the system is unable to decrypt the key provided, or if after the key was decrypted the key no longer matches the key's profile.

Make sure that the key you are using is correct or try using a new key. Contact Actian Support to report this situation.

7310: Product key has been disabled in the authorization database

The product key specified has been disabled in the authorization database on the remote licensing server. A product key may be disabled for various reasons. Contact Zen Support.

7311: Product Key is not a valid length

The product key entered is not the correct length. Product keys are either 25 or 30 characters in length, depending on the version of Zen you are authorizing. Type or paste a valid product key and try again.

7313: Product key is already used on a different machine

The product key has already been authorized on a different machine. First deauthorize the product key on the old machine, then try to authorize the key again on the new machine.

This status code can also result when you try to deauthorize a key on the machine where the key resides. A common cause is that changes to the hardware signature from when the key was authorized now prevent its deauthorization. In that case, repair the key.

7314: This key cannot be deauthorized because it was authorized on a machine with a different machine signature. Either it is being used on a different machine or, more likely, the hardware signature of the original machine has changed. If you are cloning or copying a key licensed for use on only one machine, please purchase another valid license key. Otherwise, repair the key, then try again to deauthorize it.

The signature of the machine on which the key was originally authorized does not match the signature of the machine on which you are attempting to deauthorize the key. This happens in two situations: when a key is copied to another machine and when, due to hardware updates, a machine signature changes. In the first case, you need to purchase an additional permanent key. In the second case, you need to repair the key. After the correct action, reattempt the deauthorization.

7315: Product key is already used on this machine

The product key has already been authorized on the machine. Authorization is not required because it has already been performed.

A key can be on the machine but not in the authorization database on the remote licensing server. If so, clear the key on the machine using the -clear option with the clilcadm utility, then authorize the key. See License Administrator Command Line Interface in *Zen User's Guide*.

7317: Deauthorizing a key requires an authorized key

Deauthorization cannot occur because no key is available. A product key must be authorized before it can be deauthorized. Ensure that the product key you want to deauthorize has been authorized. The key may have been removed without first being deleted.

With License Administrator, verify the key that you want to deauthorize. See To Refresh the License Information List and To Display License Information, both in *Zen User's Guide*. Try the deauthorization again and specify a valid key.

7334: Key has no machine signature associated with it

The authorization database on the remote licensing server lists no machine associated with the key. This situation can happen if you copy a VM image that includes a key already authorized, then you deauthorize the key on the original image *and* attempt to deauthorize the key on the copied VM image.

To prevent this status code, deauthorize the key before you copy the VM image. To remove a key on the copied VM image, clear the key using the CLI License Administrator. The "clear" option

removes the key from the local machine without deauthorizing it. After you clear the key, authorize it on the copied VM image.

7335: Operation is not allowed on a Multimachine Key

The operation attempted is not allowed on keys designated as Multimachine. Make certain you are using the correct key with the correct action.

7336: Authorization server prohibits authorization from within a Virtual Machine session

In most circumstances, it is possible to authorize from within a virtual machine session. The only time this error message can appear is if the product key being authorized dates from the early PSQL v10 product line. If it appears, contact your product key vendor or try the authorization again outside of a virtual machine session.

7337: The number of cores in the system exceeds the maximum allowed by the product key.

For assistance with obtaining , contact Sales or Support.

Use the License Administrator **w64clilcadm** command line utility to examine the cores associated with your license. For example, the following command shows the system core count associated with the given license under "Core Cnt":

```
C:\windows\system32>w64clilcadm -i <license key>
Decode the given product key: <license key>
Product                         Platf  Lic Type   Usr Cnt  Sess Cnt  Data Use GB  Core Cnt  Ven
-------                         -----  --------   -------  --------  -----------  --------  ---
Actian Zen 16 Enterprise Server  Any    Permanent       20       n/a          n/a         8    0
```

If you run the same command without a license, the result shows the cores associated with your system. For example, the following command shows the system core count in line 2 above the license listing:

```
C:\windows\system32>w64clilcadm -i
Decode all licenses installed:  {<machine identifier>}  Core Cnt: 8
Product                         Product Key    State     Platf     Lic Type    Usr Cnt  Sess Cnt
-------                         -----------    -----     -----     --------    -------  --------
Actian Zen 16 Enterprise Server  n/a            Expired   Windows   Temporary        20       n/a


Data Use GB  Core Cnt  Exp Date   Ven  App
-----------  --------  --------   ---  ---
        n/a         0  3/1/2024     0    1
```

7338: Authorization not allowed in debug mode

The product key cannot be authorized from within a software debugger. Exit the debugger and try the authorization again.

7340: Product key cannot be authorized because the maximum usage count has been reached. Contact your product key vendor.

The product key has already been authorized the maximum number of times allowed by the usage count.

A usage count allows you to authorize a product key again in the event of unforeseen circumstances on a particular machine. For example, if you had to replace the storage disk, you would have to reinstall the product and authorize the product key again on the same machine.

7341: Product key cannot be authorized because the maximum number of authorizations has been reached. Contact your product key vendor.

The product key has already been authorized the maximum number of times allowed.

Product keys have limited number of times they can be authorized and deauthorized. Contact your product key vendor if you need to authorize the product key again.

7342: Product key cannot be deauthorized because the maximum number of deauthorizations has been reached. Contact your product key vendor.

The product key has already been deauthorized the maximum number of times allowed. Product keys have limited number of times they can be authorized and deauthorized. Contact your product key vendor if you need to deauthorize the product key again.

7343: Product key cannot be repaired because the maximum number of repairs has been reached. Contact your product key vendor.

The product key has already been repaired the maximum number of times allowed.

Product keys have limited number of repairs allowed. Contact your product key vendor if you need to repair the product key again.

7346: Product key has been authorized on the maximum number of machines allowed. Contact your product key vendor.

The product key you are trying to authorize has already been authorized on the maximum number of machines allowed for the product purchased.

Deauthorize the key on one of the machines where the key has already been authorized before you try to authorize the product and use this key or contact your vendor to purchase additional licenses.

7347: Maximum number of offline authorizations has been reached. Contact your product key vendor.

The maximum number of offline authorizations allowed for the product key has been met.

Product keys have limited number of offline authorizations allowed. Contact your product key vendor if you need more offline authorizations.

7348: Temporary License key cannot be deauthorized

Temporary (non-removable) license keys may be authorized only once and cannot be deauthorized.

7349: Temporary License key has already been authorized

The temporary license has already been authorized and cannot be authorized again.

You are allowed to authorize a temporary license key once. A temporary license cannot be added to a machine that already uses it.

7365: Record changes were blocked due to multi-user access

Changes to the target record were not committed because of multi-user access. Refresh, verify the record, then resubmit your changes.

7366: Authorization server is busy

The authorization server is currently busy. Please try authorizing again later.

Tip... For troubleshooting tips see the knowledge base on the Actian website and search for "product authorization."

7367: Multi-user access is preventing the operation from being completed

The requested operation cannot be completed due to multiple user access conflicts. Wait a few moments and try the operation again.

7369: The server is currently unavailable. Please try again later.

The requested server is inaccessible at this time. Try accessing the server again in 20-30 minutes.

7380: The Country or City is in the embargo list

The system detected an IP address from a country or city that is on the restricted embargo list. Please contact Actian Support if you feel you reached this message in error.

7422: Login failed. The user credentials are invalid.

The credentials for the user are not recognized. Check the user credentials and try logging in again.

7423: Permission for requested operation has been denied

The current user does not have permission for the requested operation. Try logging in as a user with appropriate permissions, or request appropriate permission.

7424: User account is inactive

The requested user account is inactive. The user account needs to be authorized, or an active user account needs to be selected.

7449: Key cannot be set to active because of a pending issue with the key vendor. Contact your product key vendor.

The license data prevents this key from entering the active state. Contact your product key vendor.

7450: OEM ID does not exist

The OEM ID no longer exists. Select another OEM ID to use, or contact Actian Support for assistance.

7451: OEM account is inactive

The account for the OEM is no longer active. Select an active OEM account, or contact Actian Support for assistance.

7452: OEM user is inactive

The OEM user is no longer active. Select an active OEM user to use, or contact Actian Support for assistance.

7456: Invalid OEM user ID for the requested record

The record you are trying to access has a different OEM user ID associated with it than the OEM user ID currently logged in. Make sure that you are accessing the correct record, or that the OEM user ID logged in is correct.

7457: OEM product (Workgroup/Server) is not an authorized product

Products are authorized to OEMs based on their contractual agreement with Actian Corporation. The requested product is not authorized for the current OEM. Select an authorized product to continue.

7458: Maximum number of resets or repairs for the product key has been reached

The maximum number of operations (resets or repairs) for the product key has been met. Product keys have limited number of resets and repairs allowed. Contact your product key vendor if you need to perform one of these operations again.

7471: Maximum number of seats for this OEM has been reached

The maximum number of seats for the OEM has been met.

OEM accounts have a limited number of seats based on their contract with Actian Corporation. Contact Actian Support if you need to add seats to the OEM contract.

7472: Maximum number of licenses for this OEM has been reached

The maximum number of licenses for the OEM has been met.

OEM accounts have a limited number of licenses based on their contract with Actian Corporation. Contact Actian Support if you need to add licenses to the OEM contract.

7473: Maximum number of seats for this OEM account has been reached

The total maximum number of seats has been met. Accounts within an OEM have a limited number of seats based on their contract with Actian Corporation. Contact Actian Support if you need to add seats to the account.

7474: Maximum number of licenses for this OEM account has been reached

The total maximum number of licenses has been met.

Accounts within an OEM have a limited number of licenses based on their contract with Actian Corporation. Contact Actian Support if you need to add licenses to the account.

7475: Invalid value for user count, session count, or data in use

The requested value is either not defined or is greater than the maximum limit currently available.

7477: The OS Platform type is invalid for this account

The operating system requested for the product key is invalid for the current account. Make sure that you are using the correct account and select a valid operating system.

7478: Product type is invalid for this account

The product type requested for the product key is invalid for the current account. Make sure that you are using the correct account and select a valid product type.

7479: Upgrade type is invalid for this account

The product type requested for the product key is invalid for the current account. Make sure that you are using the correct account and select a valid product type.

8000 to 8499

Component Management Status Codes

These status codes originate from the Component Management and Event Logging interface of the MicroKernel.

8005: Interface not initialized

An interface was not initialized properly. Check the Zen event log, the file named zen.log, for more information.

8006: The specified component was not found

The component could not be found. Check the Zen event log, the file named zen.log, for more information.

8020: Error loading component

You receive this status code when one of the following occurs:

- The Services DLL received an operating system error when trying to load a component.

- A space was used in the Data Source Name (DSN) or Database Name (DBN).

For locations of Zen files, see Where are the files installed? in *Getting Started with Zen*.

8022: Component not initialized

While using a multi threaded application, one thread shut down a component and other threads continue trying to use it.

8097: General security error

This status code indicates that a general error occurred when checking or setting database security. The database engine was unable to associate the error with a more specific status code. If the error persists, contact Actian Support.

8500 to 8589

ECAS Interface Status Codes

This section describes the status codes returned by the Enhanced Common Address Space (ECAS) interface. Most of the errors are system errors and write an entry in the Zen event log, zen.log. In many cases when you receive these errors, there may be some instability in the environment or memory allocation and you will need to restart the machine.

8500: An error occurred during the components initialization

In its attempt to auto-load the Workgroup engine, the application failed to initialize the component library. You may get more information about the situation that caused this error by setting the environment variable PVSW_DISP_LOAD_ERRS=AIF, and running the application again. This setting enables the Services DLL to display on-screen module load errors. However, this environment variable should only be set to diagnose module load errors. In all other cases, it should not be set.

8502: An error occurred when trying to locate W3UPIXYY.DLL

In its attempt to auto-load the Workgroup engine, the application failed to locate or load W3UPIXYY.DLL.

8503: An invalid W3UPIXYY.DLL has been found

In its attempt to automatically load the Workgroup engine, the application discovered an incorrect version of W3UPIXYY.DLL. This problem may be caused by a corrupt version of W3UPIXYY.DLL.

8504: An error occurred when trying to create system semaphore

In its attempt to auto-load the Workgroup engine, the application failed to create the system semaphore. This problem may have been caused by the operating system running out of resources.

8505: An initialization error occurred when trying to establish a session with the Zen engine

In its attempt to automatically load the Workgroup engine, the application failed to establish the session with the engine. This is a system error.

Some customers who have only server engines in their environment have reported frequent pairs of status codes 8505 and 8517 and in the zen.log file on one or more client workstations. The most likely cause is that your workstation client is configured to connect to a local Workgroup engine when one is not installed.

Note: If you are not certain whether your environment includes Workgroup engines, please check with your administrator. The procedure below disables access to your local Workgroup engine.

To prevent the client from attempting this connection, follow these steps:

1. In ZenCC, expand **Local Client**.

2. Right-click **MicroKernel Router** and select **Properties**. Log in if prompted.

3. Click **Access**.

4. In the right hand frame, change the value of **Use Local MicroKernel Engine** to **Off**.

5. Restart the engines for the new settings to take effect.

8506: A fatal error occurred when loading the MicroKernel

In its attempt to auto-load the Workgroup engine, the application failed to load the MicroKernel, W3MKDE.DLL. This may have been caused by a missing W3MKDE.DLL.

8507: No valid session was found

The application lost its session with the Workgroup engine.

8508: An error occurred when attempting to enable Btrieve access

The application failed to enable the Btrieve access method in the Workgroup engine.

8509: A timeout occurred during the initialization of the MicroKernel

The application timed out during the initialization of the MicroKernel. This may have been caused by a bad configuration option or a malfunction of the Workgroup engine.

Check the Zen event log (zen.log) for more information.

8510: A fatal error occurred when loading the Scalable SQL engine

This status code became obsolete in Pervasive.SQL 2000.

In its attempt to auto-load the Workgroup engine, the application failed to load the Scalable SQL, W3SSQL.DLL. This may have been caused by a missing W3SSQL.DLL.

8511: An error occurred when attempting to enable SQL access

The application failed to enable the SQL access method in the Workgroup engine.

8512: A timeout occurred during the initialization of the Scalable SQL engine

This status code became obsolete in Pervasive.SQL 2000.

The application timed out during the initialization of the Scalable SQL engine. This may have been caused by an invalid configuration option or a malfunction of the Workgroup engine.

8513: An error occurred when disabling Btrieve access

The application failed to disable the Btrieve access method in the Workgroup engine.

8514: An error occurred when unloading the MicroKernel

The application failed to unload the MicroKernel.

8515: An error occurred when disabling SQL access

The application failed to disable the SQL access method.

8516: An error occurred when unloading the Scalable SQL engine

This status code became obsolete in Pervasive.SQL 2000.

The application failed to unload Scalable SQL.

8517: An error occurred when closing the session with the Zen engine

The application could not close the session with the Workgroup engine.

Some customers who have only server engines in their environment have reported frequent pairs of status code 8505 and 8517 in the zen.log file on one or more client workstations. The most likely cause is that your workstation client is configured to connect to a local Workgroup engine when one is not installed.

Note: If you are not certain whether your environment includes Workgroup engines, please check with your administrator. The procedure below disables access to your local Workgroup engine.

To prevent the client from attempting this connection, follow these steps:

1. In ZenCC, expand **Local Client**.

2. Right-click **MicroKernel Router** and select **Properties**. Log in if prompted.

3. Click **Access**.

4. In the right hand frame, change the value of **Use Local MicroKernel Engine** to **Off**.

5. Restart the engines for the new settings to take effect.

8518: An error occurred when attempting to allocate system memory

The application failed to allocate memory from the system. Possible ways to avoid this include closing all other applications and restarting the engine, decreasing the size of the cache, and changing the engine settings so that a smaller number of files and/or file handles are open.

8519: A fatal error occurred when loading the SRDE

In its attempt to auto-load the Relational Engine, the application failed to load the file, W3ODBCEI.DLL. This may have been caused by a missing W3ODBCEI.DLL.

8520: A timeout occurred during the initialization of the SRDE module

The application timed out during the initialization of the Relational Engine module. This may have been caused by a bad engine configuration option or a malfunction of the Workgroup Engine.

8521: An error occurred when unloading the SRDE module

The application failed to unload the Relational Engine module.

8590 to 8599

Database Engine Service Status Codes

This section describes the status codes returned by the database engine service. These errors are in the range 8590 to 8599 and cause an entry in the event log. In many cases when you receive these errors, there may be some instability in the environment or memory allocation and you will need to restart the machine.

8590: An error occurred in the database manager while initializing Components Manager

This error occurs when the database engine service fails to initialize the component library. You may also get more information about the problem that caused this error by setting the environment variable PVSW_DISP_LOAD_ERRS=AIF, and running the application again. This setting enables the Services DLL to display on-screen module load errors. However, this environment variable should only be set to diagnose module load errors. In all other cases, it should not be set.

8591: The database manager is already loaded

In its attempt to initialize, the Workgroup engine detected that another copy of the Workgroup engine is already running in memory. To avoid this error, shut down the program already running in one of the following ways:

- If the program is automatically loaded by an application, then terminate the application.

- If the application is automatically loaded, then shut it down using the icon in the Windows notification area.

8592: Insufficient memory to load the database manager

This error indicates that the system is out of resources. Close some applications and try again.

8593: An error occurred while the database manager was creating a system thread

This error indicates that the system is out of resources. Close some of the applications and try again.

8594: Engine cannot be restarted

The Workgroup engine has been previously stopped while there were active applications and cannot be restarted. Close all current applications and try again. If you receive this code once more, you will need to restart the computer.

10000 to 10100

SQL Connection Manager Codes

This section lists status codes returned by the SQL Connection Manager.

10000 through 10064: You have been unexpectedly disconnected from the server

Restart your application, then access the data source again. Contact your system administrator if you continue to have problems.

10065: Connection attempt timed out

The SQL Connection Manager may be inactive or using a different transport protocol from the client.

Verify that the service is running. In Windows, open the Services control panel and look at the Actian Zen service. You can also check it in Zen Control Center.

Verify that the client and server are using the same communication protocols. Open ZenCC on the client and in Zen Explorer, right-click **MicroKernel Router** and select **Properties** and then **Communication Protocols**. Make sure the list of supported protocols is the same as that for the server. To check the server side, in Zen Explorer right-click the server name and select **Properties** and then **Communication Protocols**.

–1000 to –5300

Relational Engine Status Codes

This section lists status codes returned by the Relational Engine. Should you encounter an error code that is not listed in this section, be sure to record the steps taken to get the particular error you received and notify Actian Support.

–1003: Invalid API parameter

A parameter was passed to an invalid internal API.

–1011: Out of memory

This status code may be returned in if the engine tries to allocate memory and is unsuccessful.

Free up some resources and try again. Reduce the Cache Allocation Size and/or Max MicroKernel Memory Usage configuration settings; or exit other applications on the computer.

–1020: No more file handles

While trying to open a file, a handle was not returned. Close some of your open programs and files and try again.

–1024: File share violation

There was an attempt to open a file that is read only or the specified user does not have the proper rights to open the file. Record the steps taken to get this error and notify Actian Support.

–1026: Record size limit exceeded

The record length was larger than the maximum allowed and some data has been truncated. Record the steps taken to get this error and notify Actian Support.

–1032: File access denied

There was an attempt to open a file that is read only or the specified user does not have the proper rights to open the file. Record the steps taken to get this error and notify Actian Support.

-1040: Too many columns defined

The maximum number of columns that can be defined is 1600 in a select statement; and 1536 elsewhere. Reduce the number of columns to within a valid range and try again.

-1113: Too many active sessions

Starting with Pervasive.SQL 8, the number of sessions allowed is allocated dynamically.

- Add additional memory, or close other applications on the computer where the database engine is installed, and try again.

- For Windows 32-bit servers: the number of active sessions has reached the upper limit of your memory and cannot be increased.

-1206: Non-db file or corrupted db

The file specified is not a valid database name or the database is corrupt.

-1207: Database exclusively locked

There was an attempt to access a database that has been exclusively locked by another user. Wait until the user removes the exclusive lock before continuing.

-1250: Same column cannot be renamed and modified

You cannot rename a column and modify that column at the same time. For example, the following statement causes an error because column c1 is being renamed and modified at the same time: ALTER TABLE t1 (RENAME COLUMN c1 TO c2, MODIFY COLUMN c1 INT). However, the following statement is permissible because different columns are being renamed and modified: ALTER TABLE t1 (RENAME COLUMN c1 TO c2, MODIFY COLUMN c3 INT).

-1251: Multiple columns may not be renamed to the same name

When you rename multiple columns, each new name must be unique. You cannot rename two different columns to the same name. For example, the following statement causes an error because columns c1 and c3 cannot both be named c2: ALTER TABLE t1 (RENAME COLUMN c1 TO c2, RENAME COLUMN c3 TO c2).

-1252: Column may not be renamed multiple times

When you rename multiple columns, you can rename the same column only once. For example, the following statement causes an error because column c1 is being renamed twice: ALTER TABLE t1 (RENAME COLUMN c1 to c2, RENAME COLUMN column c1 to c3).

-1302: Table is exclusively locked

There was an attempt to access a table that has been exclusively locked by another user. Wait until the user removes the exclusive lock before continuing.

-1303: Table already exists

The name you specified for a table already exists in the dictionary. Select another name or remove the current table definition before trying again.

-1304: Table is in use, cannot perform operation

The requested operation cannot be performed because another user is accessing or modifying the table. Try the operation again.

-1305: No such table or object

The table or object your tried to access does not exist. Check for the correct name and path and try again.

-1309: No DDLs without exclusive lock

You must perform an exclusive lock on the desired database before using DDL statements.

-1312: View already exists

The name that you specified for a view already exists in the dictionary. Select another name or remove the current view definition and try the operation again.

-1313: Trigger already exists

The name that you specified for a trigger already exists in the dictionary. Select another name or remove the current view definition and try the operation again.

-1314: No such table exists

The name you specified for a table does not exists in the dictionary. Specify the name of an existing table and try the operation again.

-1315: No such view exists

The name you specified for a view does not exists in the dictionary. Specify the name of an existing view and try the operation again.

-1316: No such trigger exists

The name you specified for a trigger does not exists in the dictionary. Specify the name of an existing trigger and try the operation again.

-1317: No such index exists

The name you specified for an index does not exists in the dictionary. Specify the name of an existing index and try the operation again.

-1403: Duplicate index exists

You have attempted to define the same index more than once in this definition. Rewrite the statement so the index is defined only once.

In some cases, you may be reissuing a create index statement because you cannot tell if your first statement succeeded. If you receive this error code under such conditions, then you can proceed on the assumption that your first create index operation was successful.

-1404: No such index

You tried to access an index that does not exist. Check the name and path and try again.

-1504: Null not valid

Null is not a valid parameter in the operation performed.

-1507: No such column

The column specified does not exist. Specify a correct column name.

-1508: Field is already defined

The field specified for this table has already been defined.

-1513: Index column type not supported

You cannot create an index on column types BIT, LONGVARCHAR, or LONGVARBINARY. You must create the index using a different column type.

-1520: Key length is invalid

You cannot index a character column greater than 254 characters.

-1603: Currency not on a record

A query required a temporary table and there was no unique row identifier (index) to correlate the temporary table to the result set. Adding an index to the order by or group by column will often resolve this problem.

-1605: Illegal duplicate key

This status code is returned in the following situations:

- An entry was made into one of the system tables to satisfy a request from the Relational Engine level to create a database element with the same name (column, table, constraint). You may receive this error if you just created a column or index, but you are not sure if it was created or not. If you receive this error under such conditions, then you can proceed on the assumption that your initial creation attempt was successful.

- You attempted to add a unique index to a column which already contains non-unique values.

-1809: Permission denied

The user does not have the appropriate rights for that action. Check the user permissions and try again. If this problem persists, check with your system administrator.

-1810: You are not authorized to perform this operation

The user does not have the appropriate rights for that action. Check the user permissions and try again. If this problem persists, check with your system administrator.

This status code can also be returned when you try the following conditions:

- To execute a trusted procedure without EXECUTE permission on the top-most trusted stored procedure.

- To perform any operation on a trusted view without appropriate permission on the outer-most trusted view.

- To execute a non-trusted procedure without EXECUTE permission on the top-most non-trusted stored procedure or on the referenced objects.

- To perform any operation (SELECT, INSERT, UPDATE or DELETE) on a non-trusted view without appropriate permission on the view or on the referenced objects.

- To create trusted objects as a non-Master user.

- To GRANT or REVOKE permissions on a view or stored procedure as a non-Master user.

- To drop an object without ALTER permission on the object.

-1902: Unable to log on. An invalid Username/Password may have been specified

An invalid username or password may have been specified. Check your password and try again. If you continue to have problems, check with your system administrator.

-1903: Invalid account name

Either a user with the specified user name or a group with the specified group name does not exist. Check your user/group name and try again. If you continue to have problems, check with your system administrator.

-1905: Invalid password

The password specified was not correct. Check your password and try again. If you continue to have problems, check with your system administrator.

-1907: Access denied

The user does not have the proper permissions to access the file.

-3001: User-defined functions with the same name already exist

You are trying to create a user-defined function (UDF) with the same name as an existing one. Modify the name of the UDF and execute the CREATE statement again.

-3002: The user-defined function name is invalid. User-defined function name can contain 1 to 30 characters

The length of a user-defined function (UDF) name must be at least one character and cannot exceed 30 characters. Modify the name of the UDF to fit within the name length restrictions.

-3003: Cannot insert into a COBOL data file. Invalid operation

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) You cannot perform an INSERT operation on such data files.

-3005: Cannot alter a COBOL fake table. Invalid operation

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) You cannot perform an ALTER TABLE operation on such data files.

-3006: Cannot create triggers on COBOL tables. Invalid operation

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) You cannot perform a CREATE TRIGGER operation on such data files.

-3007: Cannot create indexes on OCCURS/REDEFINES fields. Invalid operation

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) You cannot perform a CREATE INDEX operation on such data files.

-3008: A dependent OCCURS table entry exists. Drop this OCCURS table to drop the main table

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility

describes the application's understanding of data to the relational engine.) If a main table contains any OCCURS layouts, you must delete the OCCURS tables before you can delete the main table.

-3009: There is a dependent REDEFINES table. Drop this REDEFINES table to drop the main table

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) If a main table contains any REDEFINES layouts, you must delete the REDEFINES tables before you can delete the main table.

-3010: An OCCURS table with a mapping index to this index exists. Cannot drop index

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) A main table can contain indexes to which an OCCURS table can map. If an OCCURS table maps a main table index, you cannot delete the main table index unless you first remove the mapping from the OCCURS table.

-3011: A push-down filter has been defined on this column. This column cannot be updated

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) A table can contain a logical expression associated with the table. Such a table filter is referred to as a "push-down filter."

You cannot update a column if it has a push-down filter defined it.

-3012: Only CREATE INDEX IN DICTIONARY operation is supported for COBOL fake main table and variant records

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) You cannot perform a

CREATE INDEX operation on a variable record layout table unless you use the IN DICTIONARY keyword (CREATE INDEX . . . IN DICTIONARY . . .).

-3014: Trigger already exists

You are trying to create a trigger, but a trigger with the specified name already exists. Either use a different name, or drop the existing trigger before creating the new one.

-3015: Procedure already exists

You are trying to create a stored procedure, but a stored procedure with the specified name already exists. Either use a different name, or drop the existing stored procedure before creating the new one.

-3016: The fixed-portion size of a record exceeds 65535 bytes

The total size of the fixed-length portion of a record has exceeded 65535 bytes. The total size of the fixed-length portion of any data record may not exceed 65535 bytes. The fixed-length portion of any data record is made up of the following:

- all the columns that have a fixed sized (all columns except for LONGVARCHAR and LONGVARBINARY)

- one byte for each column that allows null values

- 8 bytes for each variable-length column (column of type LONGVARCHAR or LONGVARBINARY).

Status code -3016 is returned if you attempt to create a table that exceeds this limit, or if you attempt modifications that would cause a table to exceed the limit.

To determine the size in bytes of the fixed-length portion of a record before you attempt to create a new table, you can use the following calculation:

(sum of the fixed-length column sizes in bytes) + (number of nullable columns) + (8 * number of variable-length columns) = record size in bytes

If you want to determine the size of the fixed-length portion of the record for an existing data file, you can use the BUTIL -STAT command to display a report that includes this information.

-3017: Invalid path/file name

The path/file name for the data file is too long.

-3018: Invalid data type conversion to an identity column

An attempt was made to alter a data type to an identity column.

-3019: Cannot drop a system table

An attempt was made to drop a system table.

-3020: Invalid USING path/file name

The path/file name that you have specified is invalid. Specify a simple, relative path between 1-64 characters.

-3021: Invalid IN DICTIONARY

IN DICTIONARY is not allowed on bound databases.

-3022: Invalid BLOB/CLOB data type in legacy table that contains NOTE/LVAR

A NOTE/LVAR column cannot coexist with a LONGVARCHAR/LONGVARBINARY. NOTE/LVAR must first be altered to a LONGVARCHAR/LONGVARBINARY.

-3023: Data type mismatch

Data conversion failed because data cannot be converted due to data type mismatch or data overflow. This error may occur if, for example, you attempt to alter a column of type DOUBLE to type FLOAT.

-3024: String or binary data truncation error

An attempt was made to convert a char/binary data to a char/binary column that has fewer bytes.

-3025: Arithmetic overflow error

An attempt was made to convert a number to a numeric column that has less precision.

-3026: Invalid NULL conversion

You cannot convert the value NULL into a non-nullable column.

-3027: Invalid foreign key constraint name

The foreign key constraint name that you have specified is invalid. Specify a name between 1-20 characters, using numerals and letters only. It must start with a letter.

-3028: Invalid password

The password that you have specified is invalid. For maximum password length and allowed characters, see Identifier Restrictions in *Advanced Operations Guide*.

-3029: Invalid group or user name

The group or user name that you have specified is invalid. Specify a group or user name between 1and 30 characters. Numerals and letters only. Must start with a letter.

-3030: Invalid procedure or trigger name

The procedure or trigger name that you have specified is invalid. Specify a name 1–30 characters long. Numerals and letters only. Must start with a letter.

-3031: MKC library cannot be loaded

The attempt to load MKC library failed. Ensure that the following file is located in the proper directory and is the correct version for your product.

Linux: libmkc.* is located in `/usr/local/actianzen/lib` directory.

-3032: Column in use by primary key

An attempt was made to delete all indexes referencing a column. An index was encountered that is used in the primary key.

-3033: Column in use by foreign key

An attempt was made to delete all indexes referencing a column. An index was encountered that is used in the foreign key.

-3034: Type cannot be null

The requested operation cannot be performed on a column definition that is nullable.

-3035: Length of the foreign key is incompatible

You cannot define a foreign key if the column it references has a different type or attribute.

-3036: Scale of the foreign key is incompatible

You cannot define a foreign key if the column it references has a different type or attribute.

-3037: Precision of the foreign key is incompatible

You cannot define a foreign key if the column it references has a different type or attribute.

-3038: Data Type of the foreign key is incompatible

You cannot define a foreign key if the column it references has a different data type.

-3039: Trigger dependency

You cannot drop the referenced table because a trigger refers to it.

-3040: Group already exists

A group with the specified group name already exists. Use a different group name. If you continue to have problems, check with your system administrator.

If you just tried to create the specified group, but you tried again because you are not sure if it was created, this error indicates that the group was in fact created with the first attempt.

-3041: User already exists

A user with the specified user name already exists. Use a different user name. If you continue to have problems, check with your system administrator.

If you just tried to create the specified user, but you tried again because you are not sure if it was created, this error indicates that the user was in fact created with the first attempt.

-3043: Table referenced by foreign key

Cannot drop the table because it is referenced by a foreign key.

-3044: Too many levels of trigger recursion

A trigger cannot be recursively called more than 30 times.

-3045: Index in use by foreign key

Cannot drop the index because it is referred to by a foreign key.

-3046: Integrity Constraint Violation

Nullable columns are not allowed in this operation.

-3047: RI no matching primary key

You tried to create a foreign key before defining a primary key. Define a primary key before continuing.

-3048: Invalid page size

The page size specified is invalid. Specify a page size that is a multiple of 512 and lies in the range 512-4,096 bytes (4,096 is the default).

-3049: Invalid free space threshold

The free space specified is not valid. Specify a free space percentage of 5, 10, 20, or 30 percent.

-3050: Invalid page number

The page number specified is not valid. Specify a page number between 1-65,535.

-3051: The dictionary is in use

The dictionary you are trying to access is already locked by another user. Wait until that user has unlocked the dictionary and try again.

-3052: Dictionary already exists

A dictionary with the specified name already exists in that directory. Use a different dictionary name or path.

-3053: RI table does not exist

There was an attempt to define referential integrity upon a table that does not exist. Check the table name and try again.

-3054: Duplicate savepoint name error

The specified savepoint name already exists.

-3055: Only one Alternate Collating Sequence per index

There can be only one ACS on a given index.

-3056: Add Nullable column in legacy table

Cannot create true null column in a legacy table.

-3057: Conflicting collation

There are attributes of the Column Collating Sequence that conflict with the column definition.

-3058: Drop last column

Cannot drop the last column of a table. A table must contain at least one column.

-3059: Database could not find dictionary files

The dictionary files for the specified database could not be found. Make sure the dictionary files exist and are in the proper directory.

-3060: Constraint already exists

The specified constraint name already exists.

-3061: Invalid constraint name

While creating a column constraint name, the constraint name was too long, null, or had an invalid character.

-3062: Database has no security

You tried to set security privileges on a database that was not marked secure. First, enable security on the database.

-3063: Database already secured

You cannot secure a database that has already been secured.

-3064: Alter legacy table

Cannot perform an alter table on a legacy table.

-3065: Invalid login

Either an invalid user name was used or the password failed. Make sure you are using the proper login information. If you continue to have problems, check with your system administrator.

-3066: Group not found

A group with the specified group name does not exist. Specify a valid group name. If you continue to have problems, check with your system administrator.

-3067: Group not empty

A group may not be deleted if there are still valid users in that group. Remove any user names before deleting the group.

-3068: Not allowed to define synonym for Public

Public is a default group and you are not allowed to change or add a synonym for the Public group.

-3069: Not allowed to drop Public

Public is a default group and cannot be dropped from the list of groups.

-3070: Not allowed to drop Administrator

Administrator is a default user and cannot be dropped from the list of users.

-3071: Cannot revoke synonym privileges

You cannot revoke privileges to a synonym; you must revoke privileges to the group the synonym refers to.

-3072: Cannot grant synonym privileges

You cannot grant privileges to a synonym; you must grant privileges to the group to which the synonym refers.

-3073: Privileges cannot be revoked from Administrator

Administrator is a default user and you cannot revoke privileges from the Administrator user name.

-3075: Conversion rename error

While converting a database, a file could not be renamed.

-3076: Conversion delete error

While converting a database, a file could not be deleted.

-3077: Bad index name

The index name is either too long or null.

-3078: Bad column name

The column name is either too long or null.

-3079: Bad table name

The table name is either too long or null.

-3080: Data not bound

You cannot bind a database that is already bound. A database can be bound only once.

-3081: Wrong DDF bind information

The binding information does not match the information specified in the Data Dictionary Files.

-3082: DDF already bound

You cannot bind a Data Dictionary File that is already bound.

-3083: DDF not bound

You cannot unbind a Data Dictionary File that is not bound.

-3084: Shared DDF

You cannot bind a database that uses shared Data Dictionary Files.

-3085: Shared data file

You cannot bind a database that uses shared data files.

-3086: Index in use by primary key

You cannot drop the index because it is referenced by a primary key.

-3087: Primary key already exists

The table already has a primary key defined. You must delete the existing primary key and recreate it.

-3088: Incompatible file version

The file specified uses data file format 6.x or before and must be migrated to the current version of data file format before it can be used. Use the Rebuild utility to migrate file versions.

-3089: Inconsistent multipath

A foreign key cannot reference the table it is in.

-3090: Delete connected cycle

While defining a foreign key, there was a foreign key delete rule violation.

-3091: Self referencing delete not cascade

Starting with PSQL v11 SP3, this code became obsolete. A restriction on a self-referencing table can be either cascade or restrict.

You must have a delete cascade defined in the foreign key to be able to do a self-referencing delete.

-3092: RI synchronization

The binding information in the Data Dictionary File and data files does not match.

-3093: Trigger RI conflict

If a delete trigger exists on the table, a delete cascade in a foreign key is not allowed.

-3094: Invalid delete rule

Delete name rules or attributes are not valid.

-3095: Invalid update rule

Update name rules or attributes are not valid.

-3096: Object in use

Cannot delete a stored procedure, trigger or view while in use.

-3097: Invalid collate

The collating sequence has a bad name, cannot be used, or may be corrupt.

-3098: Number out of range

The range for the specified number is invalid. Check the range for the option specified and enter a correct number.

-3099: Foreign key invalid database name

While creating a foreign key, the database name specified is either too long or it is null.

-3348: Cannot create DDFs due to metadata version mismatch with existing DDFs in the location provided

See 7049: Cannot create DDFs due to metadata version mismatch with existing DDFs in the location provided.

-3358: Not allowed to unbind database and change data locations at the same time

See 2342: Not allowed to unbind database and change data locations at the same time.

-3359: Not allowed to bind database and change data locations at the same time

See 2341: Not allowed to bind database and change data locations at the same time.

-3360: Not allowed to create data dictionary and unbind database at the same time

See 2340: Not allowed to create data dictionary and unbind database at the same time.

-3362: Not allowed to change the dictionary location and create dictionary files at the same time

See 2338: Not allowed to change the dictionary location and create dictionary files at the same time.

-3363: Not allowed to change data dictionary location and unbind database at the same time

See 2337: Not allowed to change data dictionary location and unbind database at the same time.

-3364: Not allowed to change data dictionary location and bind database at the same time

See 2336: Not allowed to change data dictionary location and bind database at the same time.

-3365: Not allowed to change data locations and change name at the same time

See 2335: Not allowed to change data locations and change name at the same time.

-3366: Not allowed to create a data dictionary files and change name at the same time

See 2334: Not allowed to create a data dictionary files and change name at the same time.

-3367: Not allowed to unbind database and change name at the same time

See 2333: Not allowed to unbind database and change name at the same time.

-3368: Not allowed to bind database and change name at the same time

See 2332: Not allowed to bind database and change name at the same time.

-3369: Not allowed to change data dictionary location and change name at the same time

See 2331: Not allowed to change data dictionary location and change name at the same time.

-3370: Data file for a table is bound, but does not need to be bound

See 2330: Data file for a table is bound, but does not need to be bound.

-3371: Data file for a table is not bound

See 2329: Data file for a table is not bound.

-3374: Data dictionary files are bound, but do not need to be bound

See 2326: Data dictionary files are bound, but do not need to be bound.

-3375: Data dictionary files are already bound

See 2325: Data dictionary files are already bound.

-3376: Data dictionary files are not bound

See 2324: Data dictionary files are not bound.

-3383: Cannot create DDF files for the bound database

See 2316: Cannot create DDF files for the bound database.

-3385: Cannot create DBNAMES.CFG file

See 2314: Cannot create DBNAMES.CFG file.

-3386: The bound database cannot share data dictionary files

See 2313: The bound database cannot share data dictionary files.

-3387: The bound database cannot share table data files

See 2312: The bound database cannot share table data files.

-3390: The database is in use

See 2309: The database is in use.

-3391: The specified RI flag is invalid

See 2308: The specified RI flag is invalid.

-3392: Cannot open DBNAMES.CFG file

See 2307: Cannot open DBNAMES.CFG file.

-3393: DBNAMES.CFG could not be updated

See 2306: DBNAMES.CFG could not be updated.

-3394: The specified path for data dictionary or data file locations is invalid

See 2305: The specified path for data dictionary or data file locations is invalid.

-3395: The database type is invalid

See 2304: The database type is invalid.

-3396: The database name must be unique; the specified database name already exists

See 2303: The database name must be unique; the specified database name already exists.

-3397: Invalid buffer length

See 2302: Invalid buffer length.

-3398: The database name is invalid

See 2301: The database name is invalid.

-3399: No more database names are defined

See 2300: No more database names are defined.

-3401: Invalid column-level GRANT statement

You receive this status code when you attempt to make a column-level GRANT statement for a right that is not supported. Only SELECT, INSERT and UPDATE are valid column level rights.

In *SQL Engine Reference*, see GRANT for more information about valid syntax.

-3473: The Zen network services layer was unable to resolve the given file name into a valid path

See 3126: The Zen network services layer was unable to resolve the given file name into a valid path.

-3475: Zen network services layer task table is full

See 3124: Zen network services layer task table is full.

-3480: No authentication context is available

See 3119: No authentication context is available.

-3484: Zen network services layer encountered a transport failure

See 3115: Zen network services layer encountered a transport failure.

-3485: The routing table of the Zen network services layer is full

See 3114: The routing table of the Zen network services layer is full.

-3487: Failure during receive from the target server

See 3112: Failure during receive from the target server.

-3488: Failure during send to the target server

See 3111: Failure during send to the target server.

-3489: The network layer is not connected

See 3110: The network layer is not connected.

-3491: The Zen network services layer detected an invalid session

See 3108: The Zen network services layer detected an invalid session.

-3492: The Zen network services layer is out of memory

See 3107: The Zen network services layer is out of memory.

-3493: The Zen network services layer encountered a connection failure

See 3106: The Zen network services layer encountered a connection failure.

-3494: No available transport protocol for the Zen network services layer

See 3105: No available transport protocol for the Zen network services layer.

-3495: The Zen network services layer encountered a permission error

See 3104: The Zen network services layer encountered a permission error.

-3496: Server name not found by Zen network services layer

See 3103: Server name not found by Zen network services layer.

-3777: The MicroKernel router could not send the request to the remote engine because the specified data buffer length resulted in a data packet object that is too large

See 3022: The MicroKernel router could not send the request to the remote engine because the specified data buffer length resulted in a data packet object that is too large.

-3778: The MicroKernel router received a badly formatted data packet

See 3021: The MicroKernel router received a badly formatted data packet.

-3779: An error occurred while loading the MicroKernel

See 3020: An error occurred while loading the MicroKernel.

-3780: The MicroKernel router encountered a semaphore error

See 3019: The MicroKernel router encountered a semaphore error.

-3781: The file is already closed

See 3018: The file is already closed.

-3782: Data buffer of the local engine is too small

See 3017: Data buffer of the local engine is too small.

-3783: The MicroKernel router encountered an internal error

See 3016: The MicroKernel router encountered an internal error.

-3784: The MicroKernel router encountered an initialization error

See 3015: The MicroKernel router encountered an initialization error.

-3785: The MicroKernel router cannot find an engine

See 3014: The MicroKernel router cannot find an engine.

-3786: The remote engine is inaccessible to the MicroKernel router because the networking component is not loaded

See 3013: The remote engine is inaccessible to the MicroKernel router because the networking component is not loaded.

-3787: Local engine is not accessible to the MicroKernel router

See 3012: Local engine is not accessible to the MicroKernel router.

-3790: NETinterface.DLL is not loaded

See 3009: NETinterface.DLL is not loaded.

-3791: Invalid configuration for MicroKernel router

See 3008: Invalid configuration for MicroKernel router.

-3793: The MicroKernel router detected an invalid session

See 3006: The MicroKernel router detected an invalid session.

-3794: The MicroKernel router encountered an operating system error

See 3005: The MicroKernel router encountered an operating system error.

-3795: The MicroKernel is not responding to the MicroKernel router

See 3004: The MicroKernel is not responding to the MicroKernel router.

-3796: The MicroKernel router detected an incompatible network component

See 3003: The MicroKernel router detected an incompatible network component.

-3797: The MicroKernel router resource DLL is unavailable

See 3002: The MicroKernel router resource DLL is unavailable.

-3798: Local access is unavailable to the MicroKernel router

See 3001: Local access is unavailable to the MicroKernel router.

-3799: The MicroKernel router encountered a memory allocation error

See 3000: The MicroKernel router encountered a memory allocation error.

-4001: No relational operator found in the specified push-down filter

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) A table can contain a logical expression associated with the table. Such a table filter is referred to as a "push-down filter."

If you specify a push-down filter, you must also specify a relational operator for the filter (such as equals, greater than, less than, and so forth).

-4002: Specified push-down filter field not found in the table

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) A table can contain a logical expression associated with the table. Such a table filter is referred to as a "push-down filter."

If you specify a push-down filter for a column, the column must be in the table with which the filter is associated.

-4003: The push-down filter specified contains invalid relational operator

COBOL applications that include OCCURS, partial REDEFINES, or variable record layout can enable SQL access to the Btrieve data files by using the Cobolschemaexec utility. (The utility describes the application's understanding of data to the relational engine.) A table can contain a logical expression associated with the table. Such a table filter is referred to as a "push-down filter."

If you specify a push-down filter, you must also specify a valid relational operator for the filter. Valid operators include less than, greater than, equal to, less than or equal to, greater than or equal to, and not equal to.

-4837: The client table is full

See 162: The client table is full.

-4838: A key has reached a maximum limit for user count, session count, or data in use, or has changed state to expired or disabled.

See 161: A key has reached a maximum limit for user count, session count, or data in use, or has changed state to expired or disabled

-4850: Problem Firing Trigger

A trigger that was fired has an invalid statement or error that prevents it from running successfully. Please verify the trigger definition.

-4851: A roll forward error occurred

See 148: A roll forward error occurred.

-4852: The log segment is missing

See 147: The log segment is missing.

-4853: Duplicate sys key

See 146: Duplicate system key.

-4856: The MicroKernel cannot allow unauthorized access to files in a secure MicroKernel database

See 143: The MicroKernel cannot allow unauthorized access to files in a secure MicroKernel database.

-4860: The MicroKernel has detected an unacceptable value in the key number

See 139: The MicroKernel has detected an unacceptable value in the key number.

-4861: The NULL indicator position is invalid

See 138: The NULL indicator position is invalid.

-4863: The MicroKernel cannot find the specified Alternate Collating Sequence in the file

See 136: The MicroKernel cannot find the specified Alternate Collating Sequence in the file.

-4864: The specified ISR table is corrupt or otherwise invalid

See 135: The specified ISR table is corrupt or otherwise invalid.

-4865: The MicroKernel cannot read the International Sorting Rule

See 134: The MicroKernel cannot read the International Sorting Rule.

-4866: More than 5 concurrent users attempted to access the same data file

See 133: More than 5 concurrent users attempted to access the same data file.

-4867: The file has reached its size limit

See 132: The file has reached its size limit.

-4869: The MicroKernel ran out of system locks

See 130: The MicroKernel ran out of system locks.

-4884: The file is owned by another MicroKernel engine acting as a Gateway

See 116: The file is owned by another MicroKernel engine acting as a Gateway.

-4885: The MicroKernel cannot access the archival logging dump file

See 115: The MicroKernel cannot access the archival logging dump file.

-4886: The archival log for the specified file is invalid

See 114: The archival log for the specified file is invalid.

-4887: The MicroKernel cannot find the archival log for the specified file

See 113: The MicroKernel is unable to open the archival log for the specified file.

-4888: The specified file is in use by another client

See 112: The specified file is in use by another client.

-4889: The specified file name was not found in the archival logging configuration file

See 111: The specified file name was not found in the archival logging configuration file.

-4890: The MicroKernel cannot access the archival logging configuration file

See 110: The MicroKernel cannot access the archival logging configuration file.

-4891: An unknown error was encountered either creating or accessing a semaphore

See 109: An unknown error was encountered either creating or accessing a semaphore.

-4892: The application attempted to perform a chunk operation on a pre-6.0 file

See 107: The application attempted to perform a chunk operation on a pre-6.0 file.

-4893: The MicroKernel cannot perform a Get Next Chunk operation

See 106: The MicroKernel cannot perform a Get Next Chunk operation.

-4894: The file cannot be created with Variable-tail Allocation Tables (VATs)

See 105: The file cannot be created with Variable-tail Allocation Tables (VATs).

-4895: The MicroKernel does not recognize the locale

See 104: The MicroKernel does not recognize the locale.

-4896: The chunk offset is too big

See 103: The chunk offset is too big.

-4897: Insufficient stack space is available

See 102: Insufficient stack space is available.

-4898: Insufficient operating system memory is available

See 101: Insufficient operating system memory is available.

-4899: No cache buffers are available

See 100: No cache buffers are available.

-4902: The data buffer is too small

See 97: The data buffer is too small.

-4903: A communications environment error occurred

See 96: A communications environment error occurred.

-4904: The session is no longer valid

See 95: The session is no longer valid.

-4905: The application encountered a permission error

See 94: The application encountered a permission error.

-4906: The record lock types are incompatible

See 93: The record lock types are incompatible.

-4907: The transaction table is full

See 92: The transaction table is full.

-4908: The application encountered a server error

See 91: The application encountered a server error.

-4909: The redirected device table is full

See 90: The redirected device table is full.

-4910: A name error occurred

See 89: A name error occurred.

-4911: The application encountered an incompatible mode error

See 88: The application encountered an incompatible mode error.

-4912: The handle table is full

See 87: The handle table is full.

-4913: The file table is full

See 86: The file table is full.

-4914: File is locked

See 85: The file is locked.

-4915: Record is locked

See 84: The record or page is locked.

-4916: The MicroKernel attempted to update or delete a record that was read outside the transaction

See 83: The MicroKernel attempted to update or delete a record that was read outside the transaction.

-4917: The MicroKernel lost positioning

See 82: The MicroKernel lost positioning.

-4918: The MicroKernel encountered a lock error

See 81: The MicroKernel encountered a lock error.

-4919: The MicroKernel encountered a record-level conflict

See 80: The MicroKernel encountered a record-level conflict.

-4920: A programming error occurred

See 79: A programming error occurred.

-4921: The MicroKernel detected a deadlock condition

See 78: The MicroKernel detected a deadlock condition.

-4922: The application encountered a wait error

See 77: The application encountered a wait error.

-4923: There is a conflict on the referenced file

See 76: There is a conflict on the referenced file.

-4926: The RI definition is out of sync

See 73: The RI definition is out of sync.

-4927: The MicroKernel cannot open the RI referenced file

See 72: The MicroKernel cannot open the RI referenced file.

-4928: There is a violation of the RI definitions

See 71: There is a violation of the RI definitions.

-4930: The Delete operation specified a file that is damaged

See 69: The Delete operation specified a file that is damaged.

-4931 The MicroKernel cannot perform the RI Delete Cascade operation

See 68: The MicroKernel cannot perform the RI Delete Cascade operation.

-4932: The MicroKernel cannot open the SQL data dictionary files

See 67: The MicroKernel cannot open the SQL data dictionary files.

-4933: The maximum number of open databases has been exceeded

See 66: The maximum number of open databases has been exceeded.

-4934: The field offset is incorrect

See 65: The field offset is incorrect.

-4935: The filter limit has been reached

See 64: The filter limit has been reached.

-4936: The data buffer parameter specified on an Insert Extended operation is invalid

See 63: The data buffer parameter specified on an Insert Extended operation is invalid.

-4937: The descriptor is incorrect

See 62: The descriptor is incorrect.

-4938: The work space is too small

See 61: The work space is too small.

-4939: The specified reject count has been reached

See 60: The specified reject count has been reached.

-4940: The specified file already exists

See 59: The specified file already exists.

-4941: The compression buffer length is too short

See 58: The compression buffer length is too short.

-4942: An expanded memory error occurred

See 57: An expanded memory error occurred.

-4943: An index is incomplete

See 56: An index is incomplete.

-4944: The application specified an invalid attribute for an AUTOINCREMENT key

See 55: The application specified an invalid attribute for an AUTOINCREMENT key.

-4945: The variable-length portion of the record is corrupt

See 54: The variable-length portion of the record is corrupt.

-4946: The language interface version is invalid

See 53: The language interface version is invalid.

-4947: An error occurred while writing to the cache

See 52: An error occurred while writing to the cache.

-4948: The owner name is invalid

See 51: The owner name is invalid.

-4949: The file owner is already set

See 50: The file owner is already set.

-4950: The extended key type is invalid

See 49: The extended key type is invalid.

-4951: The alternate collating sequence definition is invalid

See 48: The alternate collating sequence definition is invalid.

-4952: The number of files opened exceeds the maximum allowed

See 47: The number of files opened exceeds the maximum allowed.

-4953: Access to the requested file is denied

See 46: Access to the requested file is denied.

-4954: The specified key flags are invalid

See 45: The specified key flags are invalid.

-4955: The specified key path is invalid

See 44: The specified key path is invalid.

-4956: The specified record address is invalid

See 43: The specified record address is invalid.

-4957: A file previously opened in Accelerated mode was not closed

See 42: A file previously opened in Accelerated mode was not closed.

-4958: The MicroKernel does not allow the attempted operation

See 41: The MicroKernel does not allow the attempted operation.

-4959: The file access request exceeds the maximum number of files allowed

See 40: The file access request exceeds the maximum number of files allowed.

-4960: A Begin Transaction operation must precede an End/Abort Transaction operation

See 39: A Begin Transaction operation must precede an End/Abort Transaction operation.

-4961: The MicroKernel encountered a transaction control file I/O error

See 38: The MicroKernel encountered a transaction control file I/O error.

-4962: Another transaction is active

See 37: Another transaction is active.

-4964: The application encountered a directory error

See 35: The application encountered a directory error.

-4965: The specified extension name is invalid

See 34: The specified extension name is invalid.

-4966: The MicroKernel cannot unload

See 33: The MicroKernel cannot unload.

-4967: The file cannot be extended

See 32: The file cannot be extended.

-4968: The file is already extended

See 31: The file is already extended.

-4969: The file specified is not a MicroKernel file

See 30: The file specified is not a MicroKernel file.

-4970: The key length is invalid

See 29: The key length is invalid.

-4971: The record length is invalid

See 28: The record length is invalid.

-4972: The key position is invalid

See 27: The key position is invalid.

-4973: The number of keys specified is invalid

See 26: The number of keys specified is invalid.

-4974: The application cannot create the specified file

See 25: The application cannot create the specified file.

-4975: The page size or data buffer size is invalid

See 24: The page size or data buffer size is invalid.

-4976: The position block parameter is not 128 bytes long

See 23: The position block parameter is not 128 bytes long.

-4977: The data buffer parameter is too short

See 22: The data buffer parameter is too short.

-4978: The key buffer parameter is too short

See 21: The key buffer parameter is too short.

-4979: The MicroKernel or Btrieve Requester is inactive

See 20: The MicroKernel or Btrieve Requester is inactive.

-4980: The application encountered an unrecoverable error

See 19: The application encountered an unrecoverable error.

-4981: The disk is full

See 18: The disk is full.

-4983: The application encountered an expansion error

See 16: The application encountered an expansion error.

-4984: The application encountered an I/O error during pre-imaging

See 15: The application encountered an I/O error during pre-imaging.

-4985: The MicroKernel cannot create or open the pre-image file

See 14: The MicroKernel cannot create or open the pre-image file.

-4986: The MicroKernel could not open the extension file for an extended file

See 13: The MicroKernel could not open the extension file for an extended file.

-4987: The MicroKernel cannot find the specified file

See 12: The MicroKernel cannot find the specified file.

-4988: The specified file name is invalid

See 11: The specified file name is invalid.

-4989: The key field is not modifiable

See 10: The key field is not modifiable.

-4990: The operation encountered the end-of-file

See 9: The operation encountered the end-of-file.

-4991: The current positioning is invalid

See 8: The current positioning is invalid.

-4992: The key number has changed

See 7: The key number has changed.

-4993: The key number parameter is invalid

See 6: The key number parameter is invalid.

-4994: The record has a key field containing a duplicate value

You attempted to create a stored procedure with the same name as an existing stored procedure. Follow these steps to recover:

1. Change the name of the stored procedure.

2. Run the statement again.

3. Run a SELECT *from X$proc# statement to get a list of the defined stored procedures. From this list, you can determine whether or not the procedure was actually created.

Also see 5: The record has a key field containing a duplicate key value

-4995: The application cannot find the key value

See 4: The application cannot find the key value.

-4996: The file is not open

See 3: The file is not open.

-4997: The application encountered an I/O error

See 2: The application encountered an I/O error.

-4998: The operation parameter is invalid

See 1: The operation parameter is invalid.

-5022: Columns in the selection list and the returns clause do not match

The number and type of columns specified in the selection list must match the number and type of columns in the RETURNS clause. For example, the following code returns error -5022 because the RETURNS clause specifies one column but the SELECT list contains two columns:

```
CREATE PROCEDURE p1 () RETURNS (c INTEGER) AS SELECT c1, c2 FROM t1;
CALL p1()
```

-5025: Only IN parameter types allowed for user-defined functions

A user-defined function (UDF) allows only IN parameters. Parameters of type OUT and INOUT are not allowed. For example, the following code returns an error because parameter "a" is designated as "out":

```
CREATE FUNCTION myfunc(OUT :a INTEGER)
RETURNS INTEGER
AS
BEGIN
    RETURN 1;
END;
```

-5027: Invalid Syntax. The last statement included within a function must be a return statement

A user-defined function (UDF) must contain a RETURN statement as the last statement in the function definition.

-5031: Default value cannot have the same UDF name as the UDF being created

The name of a user-defined function (UDF) default parameter cannot be the same name as the UDF itself. For example, the following code is incorrect because both the UDF name and the parameter name are "myfunc":

```
CREATE FUNCTION myfunc(:a INT DEFAULT myfunc(1)) RETURNS INTEGER
AS
BEGIN
    RETURN :a;
END;
```

-5032: RETURN statements in a UDF must have an argument

The RETURN statement within a user-defined function (UDF) must specify an argument because a UDF always returns a value.

-5099: *Error condition pertaining to a stored procedure*

The stored procedure returned one of the following error conditions:

Error Condition	Description
Table name cannot be qualified with database name	The context of the new table and the existing table is the current database.
View name cannot be qualified with database name	The context of the new view and the existing view is the current database.
Procedure name cannot be qualified with database name	The context of the new procedure and the existing procedure is the current database.
Function name cannot be qualified with database name	The context of the new function and the existing function is the current database.
Table name qualifier required for index renaming	You must specify the table to which the index belongs when you rename an index.
Table name qualifier required for trigger renaming	You must specify the table to which the trigger belongs when you rename a trigger.
Table name qualifier required for column renaming	You must specify the table to which the column belongs when you rename a column.
Invalid object type. Type must be one of the following: Column, Function, Index, Procedure, Table, Trigger, or View.	You tried to rename an object that is not one of the types permissible to be renamed. The permissible types are Column, Function, Index, Procedure, Table, Trigger, or View.

-5202: Record is locked

An attempt was made to access a record that is locked by another user. Wait until the record is unlocked and try again.

-5204: Table is not open

The MicroKernel was unable to open the table. Make sure you have the proper access rights and table privileges.

-5208: Invalid date

The format used for the date is incorrect. Check for the correct ODBC date format and try again.

-5219: Translation failed

The ODBC driver failed to translate the data between the data source and the application. Check if the application is using SQLSetConnectOption to override the default translation dll.

-5220: Invalid procedure name

The specified procedure name does not exist. Check the name of the procedure called and try again.

-5221: Invalid predicate name

The ODBC driver does not support this predicate. Consult the *SQL Engine Reference* for valid predicates.

-5222: Invalid Code Page value

The code page value in the ODBC configuration file is invalid. See *Advanced Operations Guide* for valid configuration settings.

-5223: User-defined function name cannot be same as built-in function name

The name of a user-defined function (UDF) cannot be same as the name of a predefined scalar function. For a discussion of the scalar functions, see Scalar Functions in *SQL Engine Reference*.

-5225: Cannot drop an in-built function or an aggregate function

You cannot delete an aggregate function or a predefined scalar function. The aggregate functions include COUNT, AVG, SUM, MAX, MIN, and DISTINCT. For a discussion of the scalar functions, see Scalar Functions in *SQL Engine Reference*.

-5226: Cannot invoke a user-defined function using CALL statement

You cannot invoke a user-defined function (UDF) with a CALL statement. You must use a SELECT statement to invoke a UDF.

-5229: Invalid user-defined or scalar function

The name you specified for a user-defined function (UDF) does not exists in the dictionary. Specify the name of an existing UDF and try the operation again.

-5230: No such stored procedure

The name you specified for a stored procedure does not exists in the dictionary. Specify the name of an existing stored procedure and try the operation again.

-5231: Stored procedure already exists

The name that you specified for a stored procedure already exists in the dictionary. Specify another name or remove the current stored procedure definition and try the operation again.

-5232: UDF already exists

The name that you specified for a user-defined function (UDF) already exists in the dictionary. Specify another name or remove the current UDF definition and try the operation again.

-5233: Only database qualifier is allowed

Tables, views, procedures, and functions can be associated with databases only. Triggers, indexes, and columns can be associated with databases and tables. The following statement is permissible because the database name and table name may be used to qualify an index name: ALTER INDEX RENAME database1:table1:index1 TO index2. However, the following statement causes an error because a view name can be qualified only with a database name: ALTER VIEW RENAME database1:table1:view1 TO view2. A permissible statement is ALTER VIEW RENAME database1:view1 TO view2 or ALTER VIEW RENAME view1 TO view2.

-5235: Domain Authentication Failed

When the underlying authentication is domain authentication, this generic error may be returned. Most likely, something went wrong in the Active Directory Service Interfaces (ADSI) calls used to authenticate the domain user and get the user's domain group associations.

-5236: Bad Domain User Name or Password

When the underlying authentication is domain authentication, this error may be returned because the domain user cannot be found or the password is incorrect.

-5237: No Zen Group Associated to Domain User

When the underlying authentication is domain authentication, this error may be returned because the domain user is not associated with a Zen group in the database. The domain user must belong to an AD group that is associated with a Zen group in the database being accessed.

-5238: Multiple Zen Groups Associated to Domain User

When the underlying authentication is domain authentication, this error may be returned because the domain user belongs to more than one Zen group in the database. The domain user must belong to an AD group that is associated with one, and only one, Zen group in the database being accessed.

-5239: Domain Authentication is a Windows Platform Security Option

When the underlying authentication is domain authentication, this error may be returned because domain authentication is being used on a non-Windows platform.

-5240: The RPC Server is Unavailable

When the underlying authentication is domain authentication, this error may be returned because the RPC Server is not available (Windows error 1722). This may occur when Zen is querying the AD domain. The user should try logging in again.

-5241: Session Credential Conflict Error

When the underlying authentication is domain authentication, this error may be returned due to a session credential conflict (Windows error 1219) when the domain server is called. Multiple connections are not allowed to a server or shared resource by the same user while using more than one user name. Disconnect all previous connections to the server or shared resource and try again.

-5243: Specified column number is not valid

The PSQL_MOVE keyword (used with ALTER TABLE) must specify a column location greater than zero but less than the total number of columns. For example, assume that table t1 has only two columns, col1 and col2. Both of the following statement return an error:

```
ALTER TABLE t1 PSQL_MOVE col1 TO 0
ALTER TABLE t1 PSQL_MOVE col1 TO 3
```

The first statement attempts to move the column to position zero. The second statements attempts to move the column to position three, which is a number greater than the total number of columns (two).

-5245: Procedure/view permissions not supported on this metadata version

Permissions on views and stored procedures are permissible only on databases with V2 metadata.

-5247: This feature is not supported for the current metadata version

Certain functionality, such as trusted and non-trusted views and stored procedures, are permissible only on databases with V2 metadata.

-5248: Invalid partial column

The last (or the only) column in a partial index is not of data type CHAR or VARCHAR.

-100 to -199

Informative Status Codes

This section lists the informative status codes that the MicroKernel can return. The MicroKernel returns these codes as negative values.

-101: The SET statement completed successfully

The following SET statements return this status code when they execute successfully:

SET SECURITY	SET OWNER	SET TRUENULLCREATE	SET VARIABLE
SET ROWCOUNT	SET TIME ZONE	SET DECIMALSEPARATORCOMMA	

The MicroKernel made the requested change. However, if a SET OWNER statement was issued during a transaction, the change does not take effect until the user begins a new transaction.

-102: The INSERT statement completed successfully

The MicroKernel added the specified rows to the table(s).

-103: The UPDATE statement completed successfully

The MicroKernel made the specified changes to the table(s).

-104: The DELETE statement completed successfully

The MicroKernel deleted the specified rows from the table(s).

-105: The CREATE statement completed successfully

The following CREATE statements return this status code when they execute successfully:

CREATE PROCEDURE	CREATE TABLE
CREATE GROUP	CREATE TRIGGER
CREATE INDEX	CREATE VIEW

The MicroKernel successfully added the group, index, stored procedure, table, trigger, or view to the data dictionary.

-106: The ALTER TABLE statement completed successfully

The MicroKernel successfully made the requested change to the table dictionary definition. If a column has been altered (including a primary key or foreign key) without specifying the IN DICTIONARY keyword, the MicroKernel also changed the data file.

-107: The DROP statement completed successfully

The following DROP statements return this status code when successfully executed:

DROP PROCEDURE	DROP TABLE
DROP GROUP	DROP TRIGGER
DROP INDEX	DROP VIEW

The MicroKernel successfully removed the group, index, stored procedure, table, trigger, or view from the dictionary. (Dropping a table also deletes the data file for that table.)

-108: The statement contains unresolved substitution variables and cannot be executed

The current SQL statement contains substitution variables and cannot be executed until values are supplied for each variable. If your application allows substitution variables, refer to the documentation included with the application to determine how to use them.

-109: The view contains no more records

The beginning or the end of the view has been reached.

-110: The GRANT statement completed successfully

The MicroKernel assigned the specified rights to the user or group.

-111: The REVOKE statement completed successfully

The MicroKernel revoked the specified rights from the user or group.

-112: The START TRANSACTION statement completed successfully

The MicroKernel has begun a transaction. All subsequent statements that you issue are part of this transaction until you issue either a COMMIT WORK or a ROLLBACK WORK statement. For a savepoint, the SAVEPOINT label remains in effect until you explicitly release or roll back to that label, or until the end of any outer transaction within which the savepoint is nested.

-113: The COMMIT WORK statement completed successfully

The MicroKernel committed the changes made by your transaction to the data tables. You can no longer undo the changes with a ROLLBACK WORK statement. For a RELEASE SAVEPOINT statement, any changes made since the savepoint was declared can no longer be rolled back separately. They can only be committed or rolled back as part of an outer transaction.

-114: The ROLLBACK WORK statement completed successfully

The MicroKernel reversed the changes you made during the transaction except for any changes you made with operations that are not affected by transaction processing. If you perform one of the following operations within a transaction, the MicroKernel completes the operation, but you cannot roll back the results:

- Operations that create or change dictionary definitions. Therefore, you cannot roll back the results of the following statements: ALTER TABLE, CREATE GROUP, CREATE INDEX, CREATE PROCEDURE, CREATE TABLE, CREATE TRIGGER, and CREATE VIEW.

- Operations that remove dictionary definitions. Therefore, you cannot roll back the results of the following statements: DROP GROUP, DROP INDEX, DROP PROCEDURE, DROP TABLE, DROP TRIGGER, and DROP VIEW.

- Operations that grant or revoke security rights. Therefore, you cannot roll back the results of the following statements: GRANT and REVOKE.

For a ROLLBACK TO SAVEPOINT statement, any changes made since the savepoint was declared are rolled back.

-115: The MicroKernel successfully recalled the stored SQL statement

This status code became obsolete in MicroKernel version 4.0, except when you are using v3.01 Compatibility mode.

-116: The MicroKernel successfully executed the stored SQL statement

This status code became obsolete in MicroKernel version 4.0, except when you are using v3.01 Compatibility mode. Starting in MicroKernel v4.0, stored procedures are used instead of stored statements.

The MicroKernel executed the stored statement that you submitted for execution.

-118: The DECLARE statement completed successfully

The following DECLARE statements return this status code when they execute successfully:

DECLARE CURSOR	DECLARE VARIABLE	DECLARE CONDITION

If you issued a DECLARE statement, the MicroKernel successfully created the cursor, variable, or condition you defined.

-119: The SET assignment statement completed successfully

The SET *variable = expression* statement returns this status code upon successful completion.

-120: The OPEN statement completed successfully

The OPEN CURSOR statement returns this status code upon successful completion.

-121: The CLOSE statement completed successfully

The CLOSE CURSOR statement returns this status code upon successful completion.

-122: The FETCH statement completed successfully

The FETCH statement returns this status code upon successful completion.

-123: The positioned UPDATE statement completed successfully

The UPDATE [*table_reference*] SET *set_clause* WHERE CURRENT OF statement returns this status code upon successful completion.

-124: The positioned DELETE statement completed successfully

The DELETE [FROM *table_reference*] WHERE CURRENT OF *cursor_name* statement returns this status code upon successful completion.

-125: The CALL stored procedure statement completed successfully

The CALL statement returns this status code upon successful completion. This status code indicates the successful completion condition for the stored procedure.

Messages

Zen can return a variety of messages to users. The messages are documented here in alphabetic order by category. Some of the messages listed may be generated by utilities that are not part of your Zen distribution.

Messages are not the same as status codes (see Status Codes). Messages are returned to end users by utilities or specific components and generally begin with a prefix and a number. For example: MKDE-16: There is insufficient memory to load the MicroKernel Engine.

Some messages refer to status codes, as in the following example:

```
Error Accessing INDEX.DDF. Status = nn
```

The status code is tied to a particular component, and it varies depending on the nature and source of the error. The value for *nn* or *xx* refers to a software-supplied number (for example, a status code, operation code, or number of records) and *xxxx* refers to a software-supplied name (for example, a filename, a data type or key type, or a command).

The messages are arranged according to the originating component. The following table lists the prefixes for each type of message.

Prefix	Type of Code
(none)	Generic Messages
BREQUTIL	Requester Utility Messages
BUTIL	Maintenance Utility Messages
MKDE	MicroKernel Engine Messages
REBUILD	Rebuild Utility Messages
VSS	VSS Writer

(No prefix)

Generic Messages

The following messages may be returned by more than one utility or component. These messages are not preceded by a component prefix or number.

Bfloat and Float Fields Must Be 4 or 8 Bytes

You have defined a FLOAT or BFLOAT column with a size other than 4 or 8 bytes. Change the column size to 4 or 8 bytes.

Column level permissions not allowed on views

Permissions for individual columns of a view are not supported. You can GRANT or REVOKE permissions for the entire view.

First and Second Password Entries Do Not Match, Please Retype

The password you entered the second time is not the same as the first one you specified. Specify and verify your password again.

Incorrect Parameter

The Client Requester returns this message if it encounters an error while loading at a DOS client machine. You specified an invalid configuration option. For information about configuration properties and specifying the configuration options, see *Advanced Operations Guide*.

Insufficient Memory

The Client Requester returns this message if it encounters an error while loading at a DOS client machine. The Requester cannot allocate enough memory for the configuration options specified. Ensure that the client machine has enough memory to load all the programs you want to run.

Invalid Load File Format. End of Record Marker Not Found

The Maintenance utility (BUTIL) encountered an invalid record terminator in the sequential load file. The Maintenance utility expects a carriage return/line feed at the end of each record in a load file. This error usually occurs because the length specified at the beginning of the sequential record is incorrect.

Local Engine Is Already Loaded

The Client Requester returns this message if it encounters an error while loading at a DOS client machine. A local engine (XQL v2.11 or earlier) is loaded at the machine. You cannot load the older local engine and the newer Requester at the same time.

Must Have DOS 3.1 or Greater

The Client Requester returns this message if it encounters an error while loading at a DOS client machine. The Requesters require DOS v3.1 or later.

Only Master user name can be specified in Execute As clause

The clause "WITH EXECUTE AS 'Master'," which can be used in the creation of a trusted view or stored procedure, can contain only "Master" as the user name. No other user name is permissible.

Redirection List Not Large Enough

The SQL Requester returns this message if it encounters an error while loading at a DOS client machine, and it cannot store all the redirected devices in its internal redirection list. Increase the value for the **/R** configuration option.

Specifying EXECUTE privilege for a Table is illegal

Table permissions do not include EXECUTE.

Specifying REFERENCES or EXECUTE privilege for a view is illegal

View permissions do not include REFERENCES or EXECUTE.

Specifying SELECT, INSERT, UPDATE, DELETE or REFERENCES privilege for a Procedure is illegal

Stored procedures permissions do not include SELECT, INSERT, UPDATE, DELETE or REFERENCES.

SQL Requester Is Already Loaded

The SQL Requester returns this message if you try to load the Requester when it is already loaded at the DOS client machine.

BREQUTIL

Requester Utility Messages

This section lists the messages that the Client Requester utilities generate.

BREQUTIL-8: MicroKernel or MKDE Requester is not loaded

You must load the MicroKernel or a MKDE Requester before you can perform a MKDE operation.

BREQUTIL-9: MKDE operation nn was unsuccessful. The number of the applicable MKDE status code is nn

See Status Codes for a description of status code nn, where nn is the number of the status code.

BREQUTIL-16: MicroKernel or MKDE Requester cannot be removed from memory while the MKDE is loaded

If you want to unload the MicroKernel or MKDE Requester, unload the MKDE first.

BUTIL

Maintenance Utility Messages

The following messages are specific to the Maintenance utility.

BUTIL-1: Message file initialization failed

Only BUTIL.EXE in DOS returns this message. The utility could not find the BUTILDOS.MSG file, which contains messages that the utility uses.

BUTIL-2: Message file initialization failed. BUTIL was unable to access BTIUTILD.MSG

Only BUTIL.EXE in DOS returns this message. The utility could not find the BTIUTILD.MSG file, which contains messages that the utility uses. Ensure that you installed the Transactional engine for DOS correctly.

BUTIL-6: The BUTIL command is invalid

The syntax of the command you entered is incorrect. Verify the syntax before reentering the command.

BUTIL-8: The command completed, but one or more errors occurred

An error occurred when you executed a command that performed a number of MicroKernel operations. These commands include COPY, LOAD, or CLONE. This message is accompanied by additional messages that can help you identify the problem.

BUTIL-9: The command did not complete due to an unrecoverable error

Verify that the syntax you entered is correct before reentering the command. This message is accompanied by additional messages that can help you identify the problem.

BUTIL-10: The command line contains a syntax error

The syntax of the command you entered is incorrect. Verify the syntax before reentering the command.

BUTIL-11: The command line requires the index file

If you specify the BUTIL -INDEX or -SAVE command (modified by the Y parameter) to the Maintenance utility, you must specify the full pathname of an external index file.

BUTIL-12: The command line requires the key number

If you specify the DROP command or the SAVE command (modified by the N parameter) to the Maintenance utility, you must specify the key number of the key you want to drop or by which you want to save the data file.

BUTIL-13: The key size for key of type xxxx is invalid

In a description file, the specified value of the Key Length element for a particular key is incorrect. Ensure that the value of each Key Length element is appropriate for the matching Key Type element.

BUTIL-14: The file that caused the error was <filename>

This is an informative message that identifies the file that caused the error.

BUTIL-15: Error occurred on key segment descriptor xxx of description file

An error occurred when the Maintenance utility attempted to read the key segment descriptor portion of the description file. Ensure that the elements that describe the specified key segment are valid.

BUTIL-16: BUTIL could not open the description file

Before attempting to reenter the CREATE, INDEX, or SINDEX commands, ensure that the file exists and that you specify the correct full pathname.

BUTIL-18: An error occurred during access of the sequential file

Ensure that the source file is valid.

BUTIL-19: BUTIL could not open the alternate collating sequence file

Ensure that you assigned a valid pathname to the Alternate Collating Sequence filename element in the description file.

BUTIL-20: An error occurred during access of the alternate collating sequence file

Ensure that the information in the alternate collating sequence file is formatted correctly.

BUTIL-21: The file version is earlier than 6.0

The RECOVER command cannot recover data from a Btrieve v5.x file.

BUTIL-23: The /D parameter specified to the Requester was too small for BUTIL to receive the entire record. BUTIL is writing only *nn* bytes

The Maintenance utility is writing only as many bytes as the value of the **/D** option allows. If you want the utility to write all the bytes in the record, specify a value for the **/D** option that is at least as large as the affected record.

BUTIL-25: The /D parameter specified to BUTIL was too small for BUTIL to receive any part of the record

You specified an invalid value for the Requester **/D** option. Go to the configuration properties to increase the value specified.

BUTIL-26: The data buffer is too small to hold any part of the record

The MicroKernel cannot return any data in the data buffer because the data buffer is too small to hold it. Go to the configuration properties to increase the value specified for the Largest Record Size configuration option.

BUTIL-27: An error occurred during the access of the variable page. BUTIL is writing the obtainable portion of the variable page.

An error occurred during the recovery of a file with variable-length records. The file is corrupt.

BUTIL-30: The key position cannot exceed the record length

The range of the specified key position is invalid. The key position you specify on a MicroKernel Engine call must be within the range of the record's length. For example, for a record that is 100 bytes long, a key position of 50 is within the correct range. However, a key position of 150 is not.

BUTIL-31: The key position plus key length cannot exceed the record length

The range of the key position you specified is invalid. The key position of a key plus its length cannot be larger than the record length. Verify that the key is defined so that its position plus its length does not exceed the record length.

BUTIL-32: The key length must be an even number for key type xxxx

You specified an invalid key length for the key type. Some key types must contain an even number of bytes. Specify a valid Key Length element.

BUTIL-36: The page size must be a multiple of 512, from 512 to 4,096

The page size you specified is invalid. Specify a page size based on file versions shown in the following table.

Page Size (bytes)	File Version			
	Before 9.0	9.0	9.5	13.0, 16.0
512	X	X		
1024	X	X	X	
1536	X	X		
2048	X	X	X	
2560	X	X		
3072	X	X		
3584	X	X		
4096	X	X	X	X
8192		X	X	X
16384			X	X

BUTIL-37: The record length cannot exceed the page size

The record length you specified is invalid. In the description file, the record length you specified for the Record Length element is larger than the page size you specified for the Page Size element. Specify a record length that is smaller than the page size or increase the page size.

BUTIL-38: The record length must be at least 4 and no greater than 4,096

Specify a record length between 4 and the maximum as shown in the following table.

File Version	Maximum Record Length (bytes)
5.x	4096
6.x or 7.x	4088
8.x	4086
9.0	8182
9.5	16372
13.0, 16.0	16364

Internal overhead for page data is as follows, in bytes:

- Pre-8.x file format = 8

- 8.x file format = 10 (4096 - 10 = 4086)

- 9.0 file format = 10 (8192 - 10 = 8182)

- 9.5 file format = 12 (16384 - 12 = 16372)

- 13.0 or 16.0 file format = 20 (16384 - 20 = 16364)

Note that it is advisable to leave some margin and not to use every available byte, since the amount of overhead may increase in future file formats. For more information, see Record Length in *Zen Programmer's Guide*.

BUTIL-41: The alternate collating sequence cannot be found

The Maintenance utility cannot find the alternate collating sequence file you specified in the definition file. Verify that the alternate collating sequence file exists and that the name is correct in the definition file.

BUTIL-43: The file exists, but the Replace option was not specified

The Maintenance utility did not create a file when you specified the BUTIL -CREATE command because the file already exists. To recreate this file, specify the Replace Existing File element in the description file as Y.

BUTIL-44: The file access error *nn* occurred for file filename

The Maintenance utility returns the appropriate status code and filename for a file on which a file access error occurred during the beginning or end of continuous operation. The corrective measure depends on the status code received. See Status Codes for a description of status code *nn*.

BUTIL-45: The number of duplicate keys must be between 1 and 119

Check the value specified for the Duplicate Key element in the description file.

BUTIL-47: BUTIL cannot open the command file

Ensure that the command file exists and that you specified the command file location and filename correctly.

BUTIL-48: The command file is empty

Specify the desired commands in the command file before attempting to use the command file again. In addition, ensure you specified the correct command filename.

BUTIL-49: The command file exceeds 1,000 bytes

A command file cannot contain more than 1,000 bytes. Verify that the command file adheres to this requirement.

BUTIL-50: An internal error caused BUTIL to terminate

The Maintenance utility detected an internal diagnostic error that caused it to terminate.

BUTIL-52: MKDE cannot be stopped when SQL is loaded

Unload the MKDE before attempting to unload the MicroKernel.

BUTIL-53: MKDE error *nn* occurred for file or command *xxxx*

The Maintenance utility returns a status code related to a particular file or command. The corrective measure depends on the status code received. See Status Codes for a description of status code *nn*.

BUTIL-60: The end of the file occurred while BUTIL was expecting keyword *xxxx* on key segment descriptor *nn*

Check the syntax of the description file.

BUTIL-61: The end of the file occurred while BUTIL was expecting keyword *xxxx*

Check the syntax of the description file.

BUTIL-62: BUTIL was expecting keyword xxxx on key segment descriptor *nn*

Check the syntax of the description file.

BUTIL-63: BUTIL was expecting keyword *xxxx*

Check the syntax of the description file.

BUTIL-65: BUTIL has loaded no records

Verify that you specified the command correctly and that the input file is in the correct format.

BUTIL-66: BUTIL has loaded *nn* records so far

The utility loaded the stated number of records since you issued the `BUTIL -LOAD` command. When you receive this message, the command is still executing.

BUTIL-70: The MKDE error *nn* occurred on closing a file

The Maintenance utility returns this status code while closing a file. The corrective measure depends on the status code received. See Status Codes for a description of status code *nn*.

BUTIL-74: MKDE error *nn* was returned for the Stop Command

This message applies only to the DOS environment. The Maintenance utility returns this status code after you issue the BUTIL -STOP command. The corrective measure depends on the status code received. See Status Codes for a description of status code *nn*.

BUTIL-76: When BUTIL wrote the Page Allocation Table at page *#nn*, an error occurred

The Maintenance utility returns this message while salvaging a file if the file is corrupt, or when a hardware error occurs.

BUTIL-77: When BUTIL wrote a mirror copy of the Page Allocation Table at page *#nn*, an error occurred

The Maintenance utility returns this message while salvaging a file if the file is corrupted, or when a hardware error occurs.

BUTIL-82: Error occurred on file specification of the description file

An error occurred when the Maintenance utility attempted to read the file specification portion of the description file. Ensure that the elements that describe the file specification are valid.

BUTIL-84: BUTIL internal error

The Maintenance utility encountered an internal error, such as an invalid pointer. Try to run the Maintenance utility again.

BUTIL-90: BUTIL could not allocate enough memory

Free some memory at the server by unloading unused applications.

BUTIL-91: BUTIL could not determine the size of the file

Try to recover the file using the BUTIL –RECOVER command.

BUTIL-100: An internal status code *nn*

The value *nn* specifies the ID of a status code whose string resource could not be found. If there is no additional information about the status code in this documentation, call Zen Technical Support with this information.

BUTIL-101: The list of files that were not processed is: *list*

The Maintenance utility returns this error during the ROLLFWD operation if the utility encounters a file that cannot be rolled forward. The utility stops rolling forward and lists the remaining files not processed.

If you receive this message in conjunction with the Maintenance utility message number 103, restore the missing log segment and any log segments created after it to the log directory. If you cannot restore all missing log segments, restore as many as possible. Then, perform the ROLLFWD operation and specify the *segment_number* parameter of the earliest log segment you could restore.

BUTIL-102: A Roll Forward error occurred

An internal error occurred while the MicroKernel was rolling forward files.

BUTIL-103: Log segment number *nn* is missing

The Maintenance utility returns this error during ROLLFWD operation if you do not specify a *segment_number* parameter and one of the files to be rolled forward has a Restore Segment Number that indicates a log segment number that the MicroKernel cannot find.

BUTIL-131: BUTIL was unable to create or open the sequential file

The Maintenance utility returns this message when it is unable to create or open the specified file. Check the sequential file to make sure it exists and has the read-only attribute set.

BUTIL-132: The disk volume is full

You must have more disk space to create or enlarge any data files.

BUTIL-134: BUTIL was unable to create or open the new file

Check the file specified for the BUTIL –SAVE or –RECOVER command. The file may already exist.

BUTIL-136: BUTIL was unable to write the new backup file

Verify that you specified the correct path and filename for the backup file. Also, ensure you have enough disk space for the file to be written.

BUTIL-141: File *xx* has an invalid extension. This extension is reserved for extended unformatted files

Specify a valid extension. For more information, see *Advanced Operations Guide*.

BUTIL-142: File *xx* exists

For more information about extended files, see *Advanced Operations Guide*.

BUTIL-143: File *xx* exists. This file is a potential extension of file *yy*. Remove this file and other potential extension files in this directory

For more information about extended files, see *Advanced Operations Guide*.

BUTIL-144: File *xx* has reached the size limit. The utility created one or more extension files. The last extension file is *yy*

For more information about extended files, see *Advanced Operations Guide*.

BUTIL-145: The utility found file *xx*. Remove this file before loading data from file *yy*

For more information about extended files, see *Advanced Operations Guide*.

BUTIL-146: The source file and output file cannot be the same.

Specify separate source and output files.

BUTIL-147: The utility cannot read record number xx due to MicroKernel error yy. The utility will attempt to read the remaining records from the opposite direction.

Reference the documentation for the specific status code to resolve this condition

BUTIL-148: Program aborted by user

The utility was stopped by the user.

BUTIL-149: The utility cannot create a temporary file in the current directory to process the STAT command.

Make sure that you have write permission in the current directory.

BUTIL-152: There was an error opening file filename

Check the data file attributes, path, and filename.

BUTIL-155: BUTIL cannot open the file filename

Check the path, filename, and file attributes.

BUTIL-156: Failed to login to database. MicroKernel status *xx* is returned

Reference the documentation for the specific status code to resolve this condition

BUTIL-157: Failed to logout from database. MicroKernel status *xx* is returned

Reference the documentation for the specific status code to resolve this condition

BUTIL-158: Invalid level value. Level must be 0, 1, 2, or 3.

Reference **butil -setowner** documentation and change the level value to a valid entry.

MKDE

MicroKernel Engine Messages

This following list of messages are generated by the MicroKernel. They use the prefix MKDE for MicroKernel Database Engine.

MKDE-12: The value specified for the –option is invalid

In Zen Control Center, enter the correct value for the configuration properties setting. For versions before PSQL 9, enter the correct value in the bstart.ncf, bti.ini, or bti.cfg file. Note that engine configuration settings reside in the Microsoft registry on Windows platforms and in the Zen registry for Linux platforms.

MKDE-13: The option specified is not a valid option

Remove the invalid option from the bstart.ncf, bti.ini, or bti.cfg file. Note that MicroKernel Engine configuration settings reside in the registry on Windows platforms and in the Zen registry for Linux platforms.

MKDE-16: There is insufficient memory to load the MicroKernel Engine

The system has insufficient memory to allow the MicroKernel to load as it is configured. Use the configuration properties to reconfigure the MicroKernel to use less memory, or unload any unnecessary applications.

MKDE-20: The log file filename cannot be written. Check disk space

If the disk is full, free some space by deleting any unnecessary files. When an error occurs while writing to the transaction log file, the MicroKernel attempts to resume transaction logging after every update to a data file containing system data. Therefore, when the condition causing the error is corrected (for example, when more disk space is made available), the MicroKernel automatically resumes transaction logging.

MKDE-25: The file filename is rolling back

Rolling back is the procedure the MicroKernel uses to restore a file to a consistent state after a system crash. This procedure undoes the most recent changes to the file (changes in the most recent system transaction).

MKDE-51: Program initialization failed; the program was not loaded

This is an informative message that the MicroKernel returns when an error prevents the MicroKernel from loading. Another message accompanies this one and provides more specific information about the nature of the error.

MKDE-57: The file filename cannot be created in the log segment directory *xxxx*

While initializing, the MicroKernel could not find the specified transaction log segment directory, so it did not load. Ensure that the directory exists and that the MicroKernel has rights to it. Use the configuration properties to specify the transaction log directory.

MKDE-58: The file filename cannot be opened in the log segment directory *xxxx*

While initializing, the MicroKernel could not open the specified file in the transaction log segment directory, so it did not load. Ensure that the directory and file exist and that the MicroKernel has rights to it. Another possibility is that someone has opened the file with an exclusive lock. Use the Monitor utility to see if another user has locked the file.

MKDE-59: The log segment file filename cannot be created

The MicroKernel could not create the specified transaction log segment file. Ensure that you have enough disk space and that the MicroKernel has rights to the file. Another possibility is that someone has opened the file with an exclusive lock. Use the Monitor utility to see if another user has locked the file.

This error can occur while the MicroKernel is loading, or later, during normal operations. If it occurs while the MicroKernel is loading, the loading fails and no operations are possible until the problem is corrected. If the error occurs later, during normal operations, there are some additional issues to consider.

If the MicroKernel is already loaded when an error occurs creating the transaction log file, it ceases transaction logging; however, the MicroKernel attempts to resume transaction logging after every update to a data file containing system data. Therefore, when the condition causing the error is corrected (for example, when more disk space is made available), the MicroKernel automatically resumes transaction logging.

MKDE-75: The log file format is invalid

The MicroKernel returns this message when the log segment file format is incompatible. Ensure that the version of the MicroKernel doing the roll forward is the same as the version of the MicroKernel that created the log file.

MKDE-76: An Open operation failed on *"xxxx"* with MKDE error *nn*

The MicroKernel returns this message during roll forward operations when an engine error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-77: An unexpected MKDE error *nn* occurred on INSERT to *"xxxx"*

The MicroKernel returns this message during roll forward operations when an Insert error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-78: An unexpected MKDE error *nn* occurred on UPDATE in *"xxxx"*

The MicroKernel returns this message during roll forward operations when an Update error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-79: An unexpected MKDE error *nn* occurred on DELETE from *"xxxx"*

The MicroKernel returns this message during roll forward operations when a Delete error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-80: The system is out of memory

The MicroKernel returns this message when the server has insufficient memory to allow the program to operate. Unload any unnecessary applications and retry the roll forward operation.

MKDE-81: An internal error *nn* occurred

The MicroKernel returns this message when an internal error occurs. Try to perform the operation again.

MKDE-82: An unexpected MKDE error *nn* occurred on GET EQUAL in *"xxxx"*

The MicroKernel returns this message during roll forward operations when a Get Equal error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-83: The log file is corrupt

The MicroKernel returns this message when the log segment file is damaged and unreadable. The Log Segment Manager cannot perform roll forward operations using this log segment.

MKDE-84: An error occurred while reading the log file

The MicroKernel returns this message when an error prevents the program from reading the log segment file. The MicroKernel cannot perform roll forward operations using this log segment.

MKDE-85: An unexpected MKDE error *nn* occurred on CREATE INDEX to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a CREATE INDEX operation for the specified file. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-86: An unexpected MKDE error *nn* occurred on DROP INDEX to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a DROP INDEX operation for the specified file. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-87: An unexpected MKDE error *nn* occurred on BEGIN TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a BEGIN TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-88: An unexpected MKDE error *nn* occurred on END TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on an END TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-89: An unexpected MKDE error *nn* occurred on ABORT TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on an ABORT TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-90: An unexpected MKDE error *nn* occurred on CLOSE to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a CLOSE operation for the specified file. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-91: An unexpected MKDE error *nn* occurred on GET POSITION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a GET POSITION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-92: An unexpected MKDE error *nn* occurred on BEGIN TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on a BEGIN TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-93: An unexpected MKDE error *nn* occurred on END TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on an END TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-94: An unexpected MKDE error *nn* occurred on ABORT TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on an ABORT TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. See Status Codes for a description of status code *nn*.

MKDE-98: The log segment file SYS:SYSTEM/MKDE/LOG/0000XXX.LOG cannot be created. There was an error on the console or in zen.log

The MicroKernel could not create the specified transaction log segment file. Ensure that you have enough disk space and that the MicroKernel has rights to the file. Another possibility is that someone has opened the file with an exclusive lock. Use the Monitor utility to see if another user has locked the file.

This error can occur while the MicroKernel is loading, or later, during normal operations. If it occurs while the MicroKernel is loading, the loading fails and no operations are possible until the problem is corrected. If the error occurs later, during normal operations, there are some additional issues to consider.

If the MicroKernel is already loaded when an error occurs creating the transaction log file, it ceases transaction logging; however, the MicroKernel attempts to resume transaction logging after every update to a data file containing system data. Therefore, when the condition causing the error is corrected (for example, when more disk space is made available), the MicroKernel automatically resumes transaction logging.

MKDE-103: System Error

The MicroKernel Engine returns this message when a system error occurs. See MKDE-2039: System Error: nn.nn.nn for more information.

MKDE-1001: The value specified for Cache Allocation is invalid

Specify a valid value. For more information about valid values, see *Advanced Operations Guide*.

MKDE-1002: The value specified for Longest Compressed Record Size is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

MKDE-1003: The value specified for Extended Operation Buffer Size is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

MKDE-1004: The value specified for Open Files is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

MKDE-1005: The value specified for Operation Bundle Limit is invalid

Specify a valid value. For more information about valid values, see *Advanced Operations Guide*.

MKDE-1007: The value specified for Number of Handles is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

MKDE-1008: The value specified for I/O Threads is invalid

Specify a valid value. For more information about valid values, see *Advanced Operations Guide*.

MKDE-1009: The value specified for Maximum Sort Buffer is invalid

Specify a valid value. For more information about valid values, see *Advanced Operations Guide*.

MKDE-1010: The path specified for Temporary Sorting Files is invalid

Specify a valid path. For more information about valid values, see *Advanced Operations Guide*.

MKDE-1011: Info: The Number of Handles cannot be less than the Number of Open Files

This message became obsolete in Pervasive.SQL 2000i. These settings are managed dynamically by the engine.

MKDE-1015: The value specified for Maximum Record Size is invalid

This message became obsolete in Pervasive.SQL 2000i.

MKDE-1017: The value specified for System Transaction Hold Limit is invalid

This message became obsolete in Pervasive.SQL 2000i.

MKDE-1019: The value specified for Maximum Active Clients is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

MKDE-1020: The value specified for Worker Threads is invalid

Obsolete in Pervasive.SQL 2000i. The number of Worker Threads is managed dynamically by the engine. If you receive this message, contact Actian Technical Support.

MKDE-1021: The value specified for Thread Priority Delta is invalid

Obsolete in Pervasive.SQL 2000.

MKDE-1022: The value specified for Initiation Time Limit is invalid

Specify a valid value. For more information about valid values, see *Advanced Operations Guide*.

MKDE-1023: The value specified for Disk I/O Wait Time is invalid

Obsolete in Pervasive.SQL 2000.

MKDE-1024: The value specified for Page Write Group Size is invalid

Obsolete in Pervasive.SQL 2000.

MKDE-1025: The value specified for Auto-Terminate Delay is invalid

Obsolete in Pervasive.SQL 2000.

MKDE-1026: The value specified for Number of Lines Allocated is invalid

Obsolete in Pervasive.SQL 2000.

MKDE-1027: The value specified for Message Log File Limit is invalid

Obsolete in Pervasive.SQL 2000.

MKDE-1028: The path specified for Home Directory is invalid

Obsolete in Pervasive.SQL 2000.

MKDE-1030: The value specified for the option_name option is invalid

The MicroKernel Engine returns this message when the value specified for the *option_name* option is invalid. Specify a valid value.

MKDE-1032: The option specified is not a valid option

The MicroKernel Engine returns this message when the option you specified is not valid. Specify a valid configuration option.

MKDE-1152: MKDE cannot get sufficient memory to complete the operation

The computer has insufficient memory to allow the MicroKernel to load as it is configured. Configure the MicroKernel to use less memory or unload any unnecessary applications.

MKDE-1156: The log file *filename* cannot be written. Check disk space

The transaction log file *filename* cannot be written. Check the disk space. If the disk is full, free some space by deleting any unnecessary files. When an error occurs while writing to the transaction log file, the MicroKernel attempts to resume transaction logging after every update to a data file containing system data. Therefore, when the condition causing the error is corrected (for example, when more disk space is made available), the MicroKernel automatically resumes transaction logging.

MKDE-1157: System Error: *nn.nn.nn*

The MicroKernel Engine returns this message when a system error occurs. See MKDE-2039: System Error: nn.nn.nn for more information.

MKDE-1161: The file *filename* is rolling back

Rolling back is the procedure the MicroKernel uses to restore a file to a consistent state after a system crash. This procedure undoes the most recent changes to the file (changes in the most recent system transaction).

MKDE-1164: Error creating/accessing semaphore

The MicroKernel returns this message if an internal error occurs.

MKDE-1165: Error creating execution thread

Decrease the value of the **Number of Input/Output Threads** configuration option.

To perform this task, open ZenCC and right-click the database engine you wish to configure, then click **Properties**. Click **Performance Tuning** and then set the desired value for **Number of Input/Output Threads**.

MKDE-1166: Could not open Zen Event Log file. This file is created in the home directory. Verify that the directory is present and sufficient space is available.

The MicroKernel returns this message when it cannot create the event log zen.log in the directory. Make sure that the disk on your computer is not full.

MKDE-1167: Could not create IPC queue

The MicroKernel returns this message if an internal error occurs.

MKDE-1168: Client(s) active - Shutdown anyway?

The MicroKernel returns this message when you attempt to shut down the Workgroup engine while at least one application is still using the engine. If you choose to shut down anyway, you could lose data.

MKDE-1169: Could not open BTI.INI

The MicroKernel returns this message when it cannot open the file BTI.INI. Make sure that the file is in the home directory. Note that engine configuration settings reside in the registry on Windows platforms and in the Zen registry for Linux platforms.

MKDE-1171: The file BTI.INI is flagged as read only. The MKDE can temporarily override this attribute to save the current settings. Do you wish to continue?

The MicroKernel returns this message if the BTI.INI file is flagged as read only and you attempt to changes to the BTI.INI configuration settings. If you choose to continue, the MicroKernel updates the BTI.INI file but maintains its read only status. If you choose not to continue, the MicroKernel does not update the BTI.INI file. You can still change the configuration settings, but they are only in effect for the current session. Note that engine configuration settings reside in the registry on Windows platforms and in the Zen registry for Linux platforms.

MKDE-1172: Error writing to BTI.INI

Make sure that your system disk is not full and that you have the appropriate rights to the file. Note that engine configuration settings reside in the registry on Windows platforms and in the Zen registry for Linux platforms.

MKDE-1175: I/O error - *filename*

The MicroKernel returns this message when it encounters an I/O error while reading from or writing to a file. This message typically accompanies status code 2.

MKDE-1176: Variable page error - *filename*

The MicroKernel returns this message when it encounters an error on a variable page. This message typically accompanies status code 2.

MKDE-1177: Help is not available

This message became obsolete in Pervasive.SQL 2000.

The MicroKernel returns this message when it cannot find the help file (btrieve.hlp). Make sure that the file is located in the home directory.

MKDE-1178: Resources allocated

This is an informative message from the MicroKernel Engine. No action is required.

MKDE-1179: Resources released

This is an informative message from the MicroKernel Engine. No action is required.

MKDE-1180: System Error: *nn.nn.nn*

The MicroKernel Engine returns this message when a system error occurs. See MKDE-2039: System Error: nn.nn.nn for more information.

MKDE-1183: Not enough available cache to complete an operation

Configure the MicroKernel to use more cache memory or reduce the file's page size.

MKDE-1184: Unable to set number of file handles to requested value. Maximum open files reduced to *nn*.

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

The MicroKernel is unable to set the Maximum Open Files to the value you specified; instead the MicroKernel uses the value indicated in the message. To avoid receiving this message, run fewer applications at the same time.

MKDE-1192: Settings read from NOVDB.INI – To change to BTI.INI, save current settings

The MicroKernel returns this message when it loads and then finds a NOVDB.INI file where it expects to find the BTI.INI file. To use the BTI.INI file, open the configuration properties and save the current settings. This message pertains to legacy versions of the product and no longer applies to more recent versions. Also note that the MicroKernel Engine configuration settings reside in the registry on Windows platforms and in the Zen registry for Linux platforms.

MKDE-1193: The MKDE is using default settings

The MicroKernel returns this message when it cannot find values for any configuration options in the location they are normally stored (Zen registry for Linux and the registry on Windows). This message means that the internal default values are being used and saved off to the default location. You may update the configuration options using the Zen Control Center. See Configuration Reference in *Advanced Operations Guide*.

MKDE-1194: Additional worker thread spawned

The MicroKernel returns this message when it must create more worker threads than the number specified by the Number of Worker Threads configuration option. To avoid receiving this message, increase the value for the **Number of Worker Threads** option.

MKDE-1207: The log file format is invalid

The MicroKernel returns this message when the log segment file format is incompatible. Ensure that the version of the MicroKernel doing the roll forward is the same as the version of the MicroKernel that created the log file.

MKDE-1208: An Open operation failed on "*xxxx*" with MKDE error *nn*

The MicroKernel returns this message during roll forward operations when an error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-1209: An unexpected MKDE error *nn* occurred on INSERT to "*xxxx*"

The MicroKernel returns this message during roll forward operations when an Insert error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-1210: An unexpected MKDE error *nn* occurred on UPDATE in *"xxxx"*

The MicroKernel returns this message during roll forward operations when an Update error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-1211: An unexpected MKDE error *nn* occurred on DELETE from *"xxxx"*

The MicroKernel returns this message during roll forward operations when a Delete error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-1212: The system is out of memory

The MicroKernel returns this message when the server has insufficient memory to allow the program to operate. Unload any unnecessary applications and retry the roll forward operation.

MKDE-1213: An internal error *nn* occurred

The MicroKernel returns this message when an internal error occurs. Try to perform the operation again.

MKDE-1214: An unexpected MKDE error *nn* occurred on GET EQUAL in *"xxxx"*

The MicroKernel returns this message during roll forward operations when a Get Equal error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-1215: The log file is corrupt

The MicroKernel returns this message when the log segment file is damaged and unreadable. The MicroKernel cannot perform roll forward operations using this log segment.

MKDE-1216: An error occurred while reading the log file

The MicroKernel returns this message when an error prevents the program from reading the log segment file. The MicroKernel cannot perform roll forward operations using this log segment.

MKDE-1217: An unexpected MKDE error *nn* occurred on CREATE INDEX to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a CREATE INDEX operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1218: An unexpected MKDE error *nn* occurred on DROP INDEX to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a DROP INDEX operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1219: An unexpected MKDE error *nn* occurred on BEGIN TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a BEGIN TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1220: An unexpected MKDE error *nn* occurred on END TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on an END TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1221: An unexpected MKDE error *nn* occurred on ABORT TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on an ABORT TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1222: An unexpected MKDE error *nn* occurred on CLOSE to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a CLOSE operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1223: An unexpected MKDE error *nn* occurred on GET POSITION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a GET POSITION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1224: An unexpected MKDE error *nn* occurred on BEGIN TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on a BEGIN TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1225: An unexpected MKDE error *nn* occurred on END TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on an END TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-1226: An unexpected MKDE error *nn* occurred on ABORT TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on an ABORT TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2001: The value specified for the Cache Allocation option is invalid

The MicroKernel returns this message when the value specified for the **Cache Allocation Size** option is invalid. Use the configuration properties and specify a valid value for this option. Starting in Pervasive.SQL 8, this value can be managed dynamically by the MicroKernel.

MKDE-2002: The value specified for the Largest Compressed Record Size option is invalid

This message became obsolete in Pervasive.SQL 2000i.

The MicroKernel returns this message when the value specified for the **Largest Compressed Record Size** option is invalid. Use the configuration properties to specify a valid value for this option.

MKDE-2004: The value specified for the Number of Open Files option is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

The MicroKernel returns this message when the value specified for the **Number of Open Files** option is invalid. Use the configuration properties and specify a valid value for this option.

MKDE-2005: The value specified for the Operation Bundle Limit option is invalid

The MicroKernel returns this message when the value specified for the **Operation Bundle Limit** option is invalid. Use the configuration properties and specify a valid value for this option.

MKDE-2007: The value specified for the Number of Handles option is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

The MicroKernel returns this message when the value specified for the **Number of Handles** option is invalid. Use the configuration properties and specify a valid value for this option.

MKDE-2008: The value specified for the I/O Threads option is invalid

The MicroKernel returns this message when the value specified for the number of **Number of Input/Output Threads** option is invalid. Use the configuration properties and specify a valid value for this option.

MKDE-2009: The value specified for the Active Clients option is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

The MicroKernel returns this message when the value specified for the **Active Clients** option is invalid. Use the configuration properties and specify a valid value for this option.

MKDE-2010: The value specified for the Sort Buffer Size option is invalid

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

The MicroKernel returns this message when the value specified for the **Sort Buffer Size** option is invalid. Use the configuration properties and specify a valid value for this option.

MKDE-2011: The path specified for the Temporary Directory option is invalid

The MicroKernel returns this message when the value specified for the **Working Directory** option is invalid. Use the configuration properties to specify a valid path.

MKDE-2012: The value specified for the option is invalid

The MicroKernel returns this message when the value for an option is not valid. Return to the configuration properties and enter the correct value.

MKDE-2013: The option specified is not a valid option

The MicroKernel Engine returns this message when the option specified is not a valid option. Return to the configuration properties and remove the invalid option.

MKDE-2015: MKDE cannot get sufficient memory to complete the operation

The MicroKernel returns this message when the server has insufficient memory to allow the MicroKernel to load as it is configured. Use the configuration properties to reconfigure the MicroKernel to use less memory (**Cache Allocation Size** attribute), or unload any unnecessary applications.

MKDE-2019: The log file filename cannot be written. Check disk space

The MicroKernel returns this message when log file *filename* cannot be written. Check the disk space. If the disk is full, free some space by deleting any unnecessary files. When an error occurs while writing to the transaction log file, the MicroKernel attempts to resume transaction logging after every update to a data file containing system data. Therefore, when the condition causing the error is corrected (for example, when more disk space is made available), the MicroKernel automatically resumes transaction logging.

MKDE-2024: The file filename is rolling back

The MicroKernel returns this message when the file *filename* is rolling back. Rolling back is the procedure the MicroKernel uses to restore a file to a consistent state after a system crash. This procedure undoes the most recent changes to the file (changes in the most recent system transaction).

MKDE-2027: Error creating/accessing semaphore

The MicroKernel returns this message if an internal error occurs.

MKDE-2028: Error creating execution thread

This message became obsolete in Pervasive.SQL 2000i. This setting is managed dynamically by the engine.

MKDE-2029: Could not open Event Log file.

The MicroKernel returns this message when it cannot create the Zen event log, the file named zen.log. Make sure that the home directory exists and that the disk on your computer is not full. Also, ensure that the MicroKernel has rights to the home directory and event log file.

MKDE-2039: System Error: *nn.nn.nn*

The MicroKernel returns this message when a system error occurs.

The MicroKernel Engine uses the System Error messages to record unexpected errors resulting from an operating system call made by the engine. For example, if an error is returned when the engine makes a file I/O call to the operating system, that error is recorded in the zen.log file as a system error.

The format of a system error is *id.op.rc* where:

id	Unique System Error identifier
op	Btrieve operation being performed at the time
rc	any unexpected return code from the operating system.

The *id* corresponds to a section of code in the MKDE where the operating system call took place. There are different ID ranges depending on which engine is being used:

100-299	Common source base
600-699	Windows 32-bit platforms

The common code base contains all the file I/O requests, variable allocations, caching, and so on. The platform specific ranges cover other file open, close, read, and lock requests. These codes can guide us to the portion of the engine code that was executing when the System Error occurred. For example, IDs ranging from 110 to 124 correspond to the I/O Subsystem of the MicroKernel where disk I/O calls are made, and system errors with these ids usually correspond to file corruption problems. A list of IDs is not available publicly because a list without the specific engine and knowledge of the code would not have much value.

The second piece of the system error is the operation code. This corresponds to the Btrieve request that was being processed when the error occurred. For example, a 5 is a GetEqual operation. See *Btrieve API Guide* for more information about Btrieve operation codes. If the system error occurs while the MicroKernel Engine is performing some task that is not specifically associated with a Btrieve operation, the op will be set to -1.

The third piece of the system error is the OS return code. The meaning of the values reported here varies depending on the OS call made and the type of failure that occurred. A return code value of 0 for different IDs is likely to have different meanings, but in each case the OS did not return an actual error code. An example of a System Error where the OS return code is zero is when the OS

call returns successfully, but the data returned by the call is not what was expected. In many cases, the appearance of an occasional System Error does not indicate a problem. It is likely that the operation being performed was retried without an error and processing continued normally.

If there is a problem that would cause an interruption in normal operation, the System Error would correspond to a Zen status code returned to the application. For example, attempting to access a physically corrupt file will produce a system error such as 116.5.0 and the application will receive a status code 2.

If you experience repeated occurrences of a specific system error, along with abnormal behavior of your application, and you do not find any documentation in our knowledge base about the error, you should contact Zen with a description of the system error and the symptoms of failure in the application, and we will provide more details about the system error in question.

In addition, you can check the Microsoft website for a list of Win32 error codes.

MKDE-2053: Additional worker thread spawned

This message became obsolete in Pervasive.SQL 2000i. Worker threads are managed dynamically by the engine.

This is an informative message the MicroKernel returns when it must create more worker threads than the number specified by the **Number of Worker Threads** configuration option. To avoid receiving this message, increase the value for the **Number of Worker Threads** option.

MKDE-2055: Error creating named pipe

The MicroKernel returns this message when it is unable to create a named pipe for the pipe-manager thread.

MKDE-2060: Error reading the registry. Error code: *nn*

The MicroKernel returns this message when it is unable to find a predefined setting in the registry. Use the –REGINSTALL startup parameter next time you start the MicroKernel. This parameter forces the MicroKernel to recreate its section in the registry with the default values for each configuration option.

MKDE-2061: Error writing the registry. Error code: *nn*

The MicroKernel returns this message when it encounters an error while trying to write into the registry. Use the –REGINSTALL startup parameter next time you start the MicroKernel. This

parameter forces the MicroKernel to recreate its section in the registry with the default values for each configuration option.

MKDE-2065: Error calling Service Control dispatcher

The MicroKernel returns this message when it encounters an error during the service initialization.

MKDE-2067: There is no suitable protocol available on this computer

The MicroKernel returns this message when none of the supported protocols are installed on the computer. The Communications Server cannot initialize.

MKDE-2068: The communications server is not available

The MicroKernel returns this message when it encounters an error loading the Communications Server. Make sure the system path includes the directory where the Communications Server that was shipped with this version of the MicroKernel.

MKDE-2075: The transaction log file LAST_SEG.LOG cannot be opened

The MicroKernel returns this message when the log file format is invalid or the Transaction Log Directory does not exist. Ensure that the version of the MicroKernel that returns this message is the same as the version of the MicroKernel that created the log file.

MKDE-2076: An Open operation failed on "*xxxx*" with MKDE error *nn*

The MicroKernel returns this message during roll forward operations when an error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-2077: The log file format is invalid

The MicroKernel returns this message when the log segment file format is incompatible. Ensure that the version of the MicroKernel doing the roll forward is the same as the version of the MicroKernel that created the log file.

MKDE-2078: An Open operation failed on "*xxxx*" with MKDE error *nn*

The MicroKernel returns this message during roll forward operations when an error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-2079: An unexpected MKDE error *nn* occurred on INSERT to "*xxxx*"

The MicroKernel returns this message during roll forward operations when an Insert error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-2080: An unexpected MKDE error *nn* occurred on UPDATE in "*xxxx*"

The MicroKernel returns this message during roll forward operations when an Update error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-2081: An unexpected MKDE error *nn* occurred on DELETE from "*xxxx*"

The MicroKernel returns this message during roll forward operations when a Delete error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-2082: The system is out of memory

The MicroKernel returns this message when the server has insufficient memory to allow the program to operate. Unload any unnecessary applications and retry the roll forward operation.

MKDE-2083: An internal error *nn* occurred

The MicroKernel returns this message when an internal error occurs. Try to perform the operation again.

MKDE-2084: An unexpected MKDE error *nn* occurred on GET EQUAL in *"xxxx"*

The MicroKernel returns this message during roll forward operations when a Get Equal error occurs. The MicroKernel returns the specified status code for the specified file. See Status Codes for a description of status code *nn*.

MKDE-2085: The log file is corrupt

The MicroKernel returns this message when the specified log segment file is damaged and unreadable. The MicroKernel cannot perform roll forward operations using this log segment.

MKDE-2086: An error occurred while reading the log file

The MicroKernel returns this message when an error prevents the program from reading the log segment file. The MicroKernel cannot perform roll forward operations using this log segment.

MKDE-2087: An unexpected MKDE error *nn* occurred on CREATE INDEX to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a CREATE INDEX operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2088: An unexpected MKDE error *nn* occurred on DROP INDEX to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a DROP INDEX operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2089: An unexpected MKDE error *nn* occurred on BEGIN TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a BEGIN TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2090: An unexpected MKDE error *nn* occurred on END TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on an END TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2091: An unexpected MKDE error *nn* occurred on ABORT TRANSACTION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on an ABORT TRANSACTION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2092: An unexpected MKDE error *nn* occurred on CLOSE to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a CLOSE operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2093: An unexpected MKDE error *nn* occurred on GET POSITION to *filename*

The MicroKernel returns this message during roll forward operations when an error occurs on a GET POSITION operation for the specified file. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2094: An unexpected MKDE error *nn* occurred on BEGIN TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on a BEGIN TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2095: An unexpected MKDE error *nn* occurred on END TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on an END TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2096: An unexpected MKDE error *nn* occurred on ABORT TRANSACTION

The MicroKernel returns this message during roll forward operations when an error occurs on an ABORT TRANSACTION operation. You may have a corrupted file, or your log file may be corrupt. For more information about status code *nn*, see Status Codes.

MKDE-2109: Page server detects cache engine *IP address*, not requesting invalid pages for *n* seconds

The cache engine regularly sends requests for invalid pages to the page server. The MicroKernel returns this message when the cache engine at the specified IP address has not made a request for a time period longer than expected, which may indicate a problem.

MKDE-2111: System Error: *nn.nn.nn* File: *filename*

The MicroKernel returns this message when a system error occurs. It is identical to MKDE-2039 except that it includes a file name.

MKDE-2130: JSON filter parse error at or around character *nn*

The MicroKernel returns this message when query parsing fails. Rewrite the query to solve the problem.

MKDE-2131: JSON filter query error: *nn*

The MicroKernel returns this message when a query error occurs. Rewrite the query to solve the problem.

MKDE-2140: Zen VSS Writer successfully started

This message is informational only.

MKDE-2141: Zen VSS Writer failed to start - problem with *resource*

Due to an error in the named resource, the Zen VSS Writer failed to start. Contact Actian Support for assistance.

MKDE-2142: Zen VSS Writer failed to start - error from Windows library: *library*

Due to an error in the named Windows library, the Zen VSS Writer failed to start. Contact Actian Support for assistance.

MKDE-2143: Zen VSS Writer - error from Windows library: *library*

The Zen VSS Writer encountered an error from the named Windows library. Contact Actian Support for assistance.

MKDE-2144: Zen VSS Writer - invalid event sequence detected by *state* state

An invalid event sequence was detected by the named state. Contact Actian Support for assistance.

MKDE-2145: Zen VSS Writer received not-supported VSS request: *request*

The request received is not supported by the Zen VSS Writer. Contact Actian Support for assistance.

MKDE-2146: Zen VSS Writer - exception in *state* state

The Zen VSS Writer encountered an exception while in the named state. Contact Actian Support for assistance.

MKDE-2147: Zen VSS Writer received an ABORT event during: *state* state

During the named state the Zen VSS Writer encountered an ABORT command. Contact Actian Support for assistance.

MKDE-2148: Zen VSS Writer state: *state*

This message is informational only. The Zen VSS Writer is in the named state.

MKDE-2149: Zen VSS Writer unable to freeze MicroKernel Database Engine

An operation failed to complete during the freeze stage. Contact Actian Support for assistance.

MKDE-2150: Zen VSS is not supported by Windows XP. Use Backup Agent instead.

This message is informational only.

MKDE-2151: Zen VSS Writer is not supported as a 32-bit WOW64 process. Use Backup Agent instead.

This message is informational only.

MKDE-2154: Zen VSS Writer watchdog detected that engine was frozen too long [*nn* secs].

The Zen VSS Writer aborted because it took too long to quiesce.

MKDE-2160: Unable to set the process working set size to a minimum of *nn*% MB and a maximum of *nn*% MB.

The MicroKernel returns this message when it requests the Windows operating system to reserve memory, but resource demands on the hardware result in denial of the request. Despite this warning, in most cases the MicroKernel continues to run. For more information for why this warning occurred and performance tuning actions you may want to take, see Max MicroKernel Memory Usage in *Advanced Operations Guide*.

MKDE-2161: Unable to get the process working set size.

The MicroKernel returns this message when a query to the Windows operating system for the process working set size is denied because the MicroKernel has insufficient permissions or access rights. Despite this warning, in most cases the MicroKernel continues to run.

MKDE-2162: Cache engine open of (normal|SQL Notify) NSL session by PID %d to server %s failed. Error code: %d

The MicroKernel reports this message when an attempt to establish a cache engine connection to a remote engine fails. The application will not be able to open files. Correcting this condition may require reestablishing network connectivity and may require restarting the application or the local engine.

MKDE-2163: Cache engine close of (normal|SQL Notify) NSL session to server %s by PID %d failed. Error code: %d

The MicroKernel reports this message when an error occurs during the shutdown of a cache engine connection to a remote engine. The application has probably completed data operations. Correcting this condition may require reestablishing network connectivity and may require restarting the local engine.

MKDE-2164: Cache engine SQL listener for server %s failed. Error code: %d

The MicroKernel reports this message when a cache engine connection to a remote engine is interrupted. This interrupts data operators for the application. Correcting this condition may require restarting the application or the local engine.

MKDE-2165: Failed to start cache engine SQL listener for server %s.

The MicroKernel reports this message when the cache engine is unable to start the SQL Notify listener. This may permit stale records to be read following changes by a SQL ODBC statement from this host. Correcting this condition requires restarting the local engine. This is an abnormal event and should be reported to Actian Technical Support.

MKDE-2166: Failed to stop cache engine SQL listener for server %s.

The MicroKernel reports this message when the cache engine is unable to stop the SQL Notify listener. This may permit stale records to be read following changes by a SQL ODBC statement from this host. Correcting this condition requires restarting the local engine. This is an abnormal event and should be reported to Actian Technical Support.

MKDE-2167: More than one cache engine SQL listener detected for server %s.

The MicroKernel reports this message when the cache engine detects that more than one SQL Notify listener is executing. This may permit stale records to be read following changes by a SQL ODBC statement from this host. Correcting this condition requires restarting the local engine. This is an abnormal event and should be reported to Technical Support.

MKDE-2172: Defragmentation: *filename* encountered error *nn*.

Defragmentation stopped because validation of the defragmentation failed. No changes have been made to the file, and the operation of your system is unchanged. If database performance is a concern, please contact Technical Support.

REBUILD

Rebuild Utility Messages

This section lists the messages that the Rebuild utility generates.

REBUILD-2: The utility could not allocate memory

Check the amount of available memory and exit any applications or processes not needed to provide more memory.

REBUILD-3: The utility could not rename *file_name* to *file_name*. The MicroKernel Database Engine status code was *code_number*.

Check the meaning of the status code to help determine why the file could not be renamed.

REBUILD-4: The utility could not retrieve the MicroKernel Database Engine version information. The MicroKernel Database Engine status code was *code_number*.

Ensure that the database engine is running and check the meaning of the status cod, then try the rebuild again.

REBUILD-5: The utility could not delete *file_name*

Check file and directory permissions to help determine why the file could not be deleted.

REBUILD-7: The utility could not open *file_name*. The MicroKernel Database Engine status code was *code_number*.

Check the meaning of the status code to help determine why the file could not be opened.

REBUILD-8: The utility could not open *file_name* in the Accelerated mode. The MicroKernel Database Engine status code was *code_number*.

Check the meaning of the status code to help determine why the file could not be opened.

REBUILD-9: The utility could not create the new file or files with the MicroKernel Database Engine 6.x advanced features

Ensure that the correct version of the database engine is loaded and the file format option is not prior to 6.0.

REBUILD-10: An invalid parameter or value was specified, or the command line was invalid

Check the parameters and values passed to the utility.

REBUILD-14: The utility did not rebuild *file_name* for the following reason:

Take corrective action based on the reason provided and try the rebuild operation again.

REBUILD-15: MicroKernel Database Engine returned status *code_number* while operating on the following file: *file_name*

Check the meaning of the status code to help determine the result of the rebuild operation.

REBUILD-16: The *file_name* file is already in 6.x format

The file to be rebuilt is already in a 6.x format. Select a different format.

REBUILD-17: The *file_name* file is not a valid MicroKernel data file. The utility cannot rebuild the file.

Ensure that the file to be rebuilt is a valid MicroKernel data file and try the rebuild operation again.

REBUILD-18: The utility could not obtain the characteristics of *file_name*. The MicroKernel Database Engine status code was *code_number*.

Check the meaning of the status code to help determine the result of the rebuild operation.

REBUILD-19: The utility could not access the output directory specified. *Directory_name* might not exist or did not allow write access.

Verify that the directory exists and that the person running the rebuild utility has read/write permissions to the directory.

REBUILD-20: The utility is processing *file_name*

For a successful rebuild, the utility reports "The file was rebuilt successfully."

REBUILD-24: An error occurred accessing *file_name*. Make sure you specified a valid file name.

Verify that the file name is correct and try the rebuild operation again.

REBUILD-25: The utility is setting the owner name of an empty target file

Verify that file being rebuilt and the target file are what you want.

REBUILD-26: The utility is dropping the indexes of an empty target file

The rebuild process outputs the following information to provide a status of its operation.

REBUILD is reading the first record from the old file.

REBUILD is inserting records into the new file.

REBUILD is reading records from the old file.

REBUILD is putting back indexes on the new file.

REBUILD-27: The utility could not create the temporary file in the output directory during conversion

Verify the directory and that the person running the rebuild utility has read/write permissions to the directory.

REBUILD-31: The utility could not create *file_name*. The MicroKernel Database Engine status code was *code_number*.

The rebuild utility also outputs the following information to help you troubleshoot the operation:

REBUILD copied a total of *number* records.

The rebuild operation start time is *time*.

REBUILD-34: Key number *code_number* is invalid

Verify that the keys in the file to be rebuilt are valid.

REBUILD-35: Page size *page_size* is invalid. The page size will be changed to *page_size*. The rebuild process has ended.

The rebuild utility detected an invalid page size for the desired format and changed the page to a valid one.

REBUILD-38: The utility was terminated by the user

The rebuild utility was stopped.

REBUILD-39: The utility may not be unloaded. Use Control-C to stop the utility.

An attempt to stop the rebuild utility could not be honored by the utility. Use Control-C to stop the utility.

REBUILD-44: The utility could not clone *file_name*. The MicroKernel Database Engine status code was *code_number*.

Check the meaning of the status code to help determine the result of the rebuild operation.

REBUILD-45: The command file *file_name* does not have an <end> or [end] delimiter.

Each entry in the command file must contain the utility parameters (if any) and the set of files to convert followed by <end> or [end].

REBUILD-48: The utility could not initialize the user interface library

Close other applications to free up memory.

REBUILD-63: The utility could not initialize the localized message table

Close other applications to free up memory.

REBUILD-65: The utility could not open file *file_name* for the following reason:

Take corrective action based on the reason provided and try the rebuild operation again.

REBUILD-66: Operation(s) complete. See *file_name* for results.

Review the item specified for the results.

REBUILD-67: Errors occurred. See *file_name* for results.

Review the results for the errors. The rebuild operation also provides the following information to help with troubleshooting:

File: *file_name*   Records Processed: *number_processed*

REBUILD-68: Status code *code_number* was returned while copying records from the following file: *file_name*.

Check the meaning of the status code to help determine the result of the rebuild operation.

REBUILD-69: Internal status *internal_code* was returned while copying records from the following file: *file_name*

Check the meaning of the status code to help determine the result of the rebuild operation. If the internal status code is not listed in the Zen documentation, contact Actian Technical Support.

REBUILD-71: The file *file_name* is already in a later format than the current MicroKernel Database Engine setting

Configure the MicroKernel to create files using the file format version to which you want the specified file to be converted. See Create File Version in *Advanced Operations Guide*.

REBUILD-72: The utility only converts files to *file_format* or later

Verify the file format to which you want to convert the file.

REBUILD-73: The MicroKernel Database Engine is configured to create files in the same format as the source file. This is allowed only for *file_format* or later files.

Configure the MicroKernel to create files using the file format version to which you want the specified file to be converted. See Create File Version in *Advanced Operations Guide*.

REBUILD-74: The source file *file_name* does not contain system key. The utility could not rebuild the file as specified by user. The MicroKernel Database Engine returned status *code_number*.

Check the meaning of the status code to help determine the result of the rebuild operation.

REBUILD-75: *File_format* is not a valid file format value. Valid inputs for file format parameter are 6, 7, 8, 9, 95 and 13.

Specify a valid file format value and try the rebuild operation again.

REBUILD-78: The logfile specified, *file_name*, is not valid. It is longer than maximum path length allowed.

Specify a shorter full path name for the log file.

REBUILD-79: Invalid database name specified. Database name cannot be longer than *length* bytes.

Verify the database name and try the rebuild operation again.

REBUILD-80: Password specified is longer than the maximum limit of *length* bytes

Verify the password name and try the rebuild operation again.

REBUILD-81: User ID specified is longer than the maximum limit of *length* bytes

Verify the user name and try the rebuild operation again.

REBUILD-82: Login to database failed. MicroKernel status *code_number* was returned.

Check the meaning of the status code to help determine the result of the rebuild operation.

REBUILD-85: The size of the output file exceeds the available disk space

Check the amount of disk space and create additional space on the physical storage.

REBUILD-86: Long owner name cannot be set on pre-9.5 file formats

Clear the owner name then try the rebuild operation again.

REBUILD-90: Conversion not allowed due to long owner name. Clear the owner name before rebuilding.

Clear the owner name then try the rebuild operation again.

REBUILD-91: Rebuild with System Data v2 not allowed on files older than v13. Specify file format 13 or newer.

Convert the file version to 13.0 or 16.0 before rebuilding with System Data v2.

VSS Writer

VSS Writer Messages

The messages generated by the Zen VSS Writer component are described in the section for the MicroKernel Engine Messages (MKDE messages) beginning with MKDE-2140.