



Release Notes

InterBase XE

October, 2010

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General Information

This chapter of the InterBase XE Release Notes provides information on the following topics:

- A summary of the new features provided in this release and the chapter and user guide that explains how to use them.
- Brief descriptions of the InterBase user guides you receive upon purchase.
- A list of contact numbers, email addresses, and websites.
- Instructions on how to migrate to InterBase XE from a previous release.

Note For maintenance release updates, including bug fixes since the last major release of InterBase XE, please see the InterBase XE [Readme.html](#).

What's new in InterBase XE?

Table 1.1 summarizes the new features added to InterBase XE release and identifies the user guide that explains how to use each one.

Table 1.1 New features in InterBase XE

| Feature name | Description | User guide |
|---|---|--|
| InterBase 64-Bit Native Binary Application | InterBase XE is for customers primarily wanting to benefit from 64-bit capabilities of underlying systems. With the 64-bit edition, you can continue to use 32-bit InterBase applications. | The InterBase Operations Guide . |
| InterBase 32-Bit Native Binary Application | The <code>ib_install.exe</code> is delivered with the 32-bit Edition issue. You will need to run this installer if you want to test the 32-bit Edition on Windows. | The InterBase Operations Guide . |
| JDBC Driver Updates for Blob/Clob Support | New interfaces have been implemented with support the following: <code>java.sql.Blob</code> ; <code>java.sql.Clob</code> ; and <code>java.io.InputStream</code> . | The InterBase Developer's Guide . |
| Stronger Password Protection | This release implements stronger password protection on InterBase databases to comply with password requirements from the Payment Card Industry - Data Security Standard (PCI DSS). This additional functionality supports a longer effective password length, resulting in stronger password protection. | The InterBase Operations Guide . |
| Larger Database Cache Settings for 64-bit InterBase | There is now a larger database cache setting for 64-bit InterBase. The limit for the 64-bit engine is 75 million pages, as compared to 750K pages for 32-bit engines. | The InterBase Operations Guide . |
| EXECUTE STATEMENT for Stored Procedures | InterBase XE now provides support for the EXECUTE STATEMENT functionality. This feature enhances the InterBase Stored Procedure language. Once this is implemented, Stored Procedure developers can embed three variations of EXECUTE STATEMENT within their Stored Procedures. The variations depend on the number of rows returned from the EXECUTE STATEMENT command. The three cases are: No rows or data returned; One row of data returned; and Any number of data rows returned. | The InterBase Language Reference Guide |
| Database Fast Sweep | With the implementation of the fast sweep optimization in InterBase XE, the memory allocation issue has been mitigated. The user has the option to configure their databases for automatic sweep. In cases where large databases have large archival or infrequently modified tables, a database sweep will have minimal impact on the performance of running transactional operations. | The InterBase Operation Guide |

Table 1.1 New features in InterBase XE

| Feature name | Description | User guide |
|--|---|--|
| Table-Specific Blocking Factor | The term blocking factor is used to denote the number of records stored in a block. InterBase employs a single database-wide blocking factor that maximizes the number of rows that can be stored on a data page. | The InterBase Language Reference Guide |
| Larger Index Key Segment Size | With the ODS 15 databases the maximum index key size limit is increased. Now larger column data can use this for both single-byte character sets and multi-byte (such as UTF8) columns. | The InterBase Operation Guide |
| ibconfig parameter: THREAD_STACK_SIZE_MB 2 | This parameter controls the stack size of various threads in InterBase. The value is in multiple of MBs per thread. The valid range is 2MB to 32MB. If it is set beyond the range, the value defaults to 2MB. | The InterBase Operation Guide |

About the InterBase Document Set

The document set in PDF format requires about 13MB of space on your disk. The documents install by default when “Client and Server” or “Client” is chosen during the InterBase install process. However, in a custom install, it is possible to choose an install that does not include the document set. If you want to install documents at a later time, run the InterBase install, choose Custom, and select the documentation.

You can also copy them from the Documentation directory of the InterBase CD-ROM or download file.

Table 1.2 provides a brief description of the subjects covered in each guide. Detailed command-line and step-by-step instructions are provided for most topics. Where applicable, instructions are also provided on how to perform a task or use a feature using IBConsole, the InterBase user interface.

Table 1.2 About the InterBase user guides

| Guide Name | Description of topics covered |
|------------------------------|---|
| <i>Operations Guide</i> | <p>How-to information on working with InterBase databases. Topics include:</p> <ul style="list-style-type: none"> • Using IBConsole • Configuring and operating the InterBase server • Network configuration • Performing backups and restores • Using journaling and journal archiving • Database security • Interactive queries |
| <i>Data Definition Guide</i> | <p>How-to information on designing and building InterBase databases. Topics include:</p> <ul style="list-style-type: none"> • Specifying datatypes • Working with domains, tables and indexes • Working with procedures, triggers and generators • Encrypting databases and columns • Character sets and collation orders |
| <i>Developer's Guide</i> | <p>How-to information on developing InterBase database applications using Borland and Embarcadero development tools, JDBC, and ODBC. Topics include:</p> <ul style="list-style-type: none"> • Connecting to databases • Understanding datasets • Working with tables, queries, stored procedures, cached updated and events • Working with UDF and Blob filters • Importing and exporting data • Working with InterBase Services • Writing install wizards |
| <i>API Guide</i> | <p>How-to information on developing InterBase applications using the InterBase API interface. Topics include:</p> <ul style="list-style-type: none"> • Application requirements • Programming with the InterBase API • Working with databases, transactions, dynamic SQL, blob data, arrays, conversions, and service • Using the install and licensing APIs • Exporting XML • Handling error conditions • The InterBase API function reference |

Table 1.2 About the InterBase user guides

| Guide Name | Description of topics covered |
|---------------------------------|--|
| <i>Embedded SQL Guide</i> | How-to information on developing InterBase applications using embedded SQL. Topics include: <ul style="list-style-type: none"> • Application requirements • Working with databases, transactions, data definition statements, data, dates and times, arrays, stored procedures and events • Error handling • Dynamic SQL • Preprocessing, compiling and linking |
| <i>Language Reference Guide</i> | This is a reference guide to InterBase elements. Topics include: <ul style="list-style-type: none"> • The SQL statement and function reference • Procedures and triggers • Keywords • Error codes and messages • System tables, temporary tables, and views • Character sets and collation orders |
| <i>IBsetup.html</i> | This document provides detailed installation and registration instructions for all platforms. |
| <i>Release Notes</i> | This document provides a description of the new features offered in this release, along with a summary of major bug fixes, and updated contact information. |

Accessing the InterBase Docs

CD-ROM and download files

The document set is available in the *Doc* directory of your InterBase CD-ROM or download files.

Windows

There are links to each of the books in Start menu | Programs | InterBase | Documentation. You can, of course, copy these links to a more accessible location, or create your own links.

Linux, Solaris, and Mac OSX

To access the PDF document set, go to `<interbase_home>/doc`. You can then display any one of the six books or the Release Notes.

Acrobat Reader

You need Adobe Acrobat Reader to view the *.pdf document files.

Adobe Acrobat Reader is available for free in many languages from
<http://www.adobe.com/products/acrobat>

Contacting CodeGear and Embarcadero Technologies

Note Mailing addresses, and sales email addresses and phone numbers can be found on the CodeGear and Embarcadero websites. In addition, the CodeGear technical support website, listed below, provides a number of examples and troubleshooting tips about using InterBase and other CodeGear products.

Table 1.3 Contact information

| | |
|--------------------------|--|
| Websites | <ul style="list-style-type: none">• For Embarcadero general products, contact, and company information: www.embarcadero.com• For technical support: www.embarcadero.com/support• For education services: www.embarcadero.com/services/education.php• For Embarcadero Technologies general product, contact, and company information: www.embarcadero.com |
| Email addresses | <ul style="list-style-type: none">• CodeGear and Embarcadero general information: info@embarcadero.com• CodeGear and Embarcadero technical support: support@embarcadero.com |
| Telephone numbers | <ul style="list-style-type: none">• Embarcadero/CodeGear U.S. technical support: 800-523-7070• CodeGear headquarters: 831-431-5000• Embarcadero headquarters: 415-834-3131 |

Migrating to InterBase XE

The following steps represent the general procedures for migrating from a previous version of InterBase to a newer version. For more information about InterBase migration, see Appendix A, “[Migrating to InterBase](#),” in the *InterBase Operations Guide*.

- 1** Back-up all databases, including the security database, before un-installing the previous version.
- 2** Back-up the ibconfig file if it has been customized.
- 3** Un-install your previous server.
- 4** Install, register, and start the new server.
- 5** Restore your databases.

Note For a list of key words to avoid using in your databases, see the InterBase [Language Reference Guide](#).

Fixed Bugs

This chapter lists bugs that have been fixed for the following InterBase releases:

- InterBase XE
- InterBase 2009 SP4
- InterBase 2009 SP3
- InterBase 2009 SP2
- InterBase 2009 SP1
- InterBase 2009
- InterBase 2007 SP3
- InterBase 2007 SP2
- InterBase 2007

Bugs fixed in InterBase XE

The table below lists the bugs that were resolved in InterBase XE.

Table 2.1 Bug fixes for InterBase XE

| For InterBase XE: | | |
|---|------------|---|
| Bug Number | QC# | Description |
| InterBase XE Update: October-2010, Bugs Fixed After 10.0.0.247 Version | | |
| INTB-860 | | InterBase crashes with a specific database when a foreign key is added. |
| INTB-853 | | SELECT count() returns BIGINT - compatibility issue with existing driver/applications. |
| INTB-839 | 88501 | Sweep while inserts are happening on a database with journaling causes the server to hang and a corrupted database. |
| INTB-824 | | Investigate InterBase XE 64-bit server crash when querying for statistics using InterBase service manager. |
| INTB-822 | | RAID 280541: Server crash on ODS 13.1 database with complicated metadata script. |
| INTB-818 | 88241 | Internal gds software consistency check (can't find shared latch (300)) error with multiple connections. |
| INTB-791 | | When JAVA application connect/disconnect/operate to OTW port, IBSever claims "SSL_READ: SSL_ERROR_ZERO_RETURN" most of the times. This is a harmless issue, and does not cause any functionality issues. |
| INTB-756 | | IBConsole: crashes when pressing the F5 key. |
| INTB-661 | 62444 | RAID 260610: Examples are built on UNIX, but do not run successfully. |
| InterBase XE: September-2010, Windows | | |
| INTB-772 | 37729 | RAID 279996: An error occurs when trying to create or change a password that beings with a question mark. |
| INTB-675 | | NullPointerException (instead of an sql error message) thrown when losing the network connection and trying to run a query. |
| INTB-671 | 79851 | getMetaData(). getPrecision() returning wrong value. |
| INTB-670 | 48152 | JOIN of 2 stored procedures give "arithmetic exception error. |
| INTB-669 | 81786 | Increase request impure space size from the current 256K limit to a larger value. |
| INTB-659 | 62255 | RAID 260612: QLI crashes as soon as "SHOW FUNCTIONS" command is given. |
| INTB-654 | 50375 | OnlineDump with multiple files. |
| INTB-653 | 55499 | Inserting from VARCHAR field in one table to BLOB in another table inserts additional junk in the target table. |

Table 2.1 Bug fixes for InterBase XE

| For InterBase XE: | | |
|--------------------------|---------------|--|
| Bug Number | QC# | Description |
| INTB-650 | | no T privilege with grant option on table/view TableName. |
| INTB-597 | 2311 77931 | RAID 146832: ORDER BY using an index on a DATE column gives wrong order. |
| INTB-547 | 365 | Non-SYSDBA db owner SELECT fails even with GRANTED rights on the table. |
| INTB-538 | | RAID 273806: Optimizer regression in JOINS since InterBase 2007 Service Pack changes. |
| INTB-523 | 77315 | COALESCE and aggregate functions. |
| INTB-513 | | RAID 191536: The java.sql.DatabaseMetaData.getColumns() method returns incorrect data type for arrays and blobs. |
| INTB-493 | | IndexOutOfBoundsException thrown when calling PreparedStatement executeBatch(). |
| INTB-402 | | Unexpected behavior of database linger. |
| INTB-355 | | Parameterized query params order in SQLDA/SQLVAR not the same as visual order of question marks. |
| INTB-319 | | Possible Optimizer regression with fixes in the InterBase 2007 SP3. |
| INTB-267 | | Create Database from JDBC application does not respect character set requested. |
| INTB-264 | | RAID 272543: RDB\$FILTERS does not have a unique index on filter name leading to duplicate filters. |
| INTB-253 | | RAID 270024: InterBase cannot use 2GB+ database cache even if Large Address Aware flag was set. |
| INTB-236 | | RAID 271600: "Request Synchronization error" reported on 8-core system with heavy activity. |
| INTB-235 | | RAID 270959: Accessing ODS 10.x database leads to server crash. |
| INTB-151 | | RAID 269627: Unique superkey license files belonging to the same "addon" package are all not loaded by the licensing engine. |
| | 3424 | When you open the Properties form for a table or procedure and select the Permissions tab, the column headers rarely appear. If you select another tab and then come back to the Permissions tab, the column headers will be there. |
| | 4989 | I add a UDF with a param of type DATE, the UDF is created, but when I try to show the property of the UDF, IBConsole shows the Message: 'unsupported Datatype' The UDF cannot be dropped in IBConsole. The UDF works fine in ISQL, and can be dropped in ISQL This happens also with TIMESTAMP and TIME. |

Table 2.1 Bug fixes for InterBase XE

| For InterBase XE: | | |
|-------------------|-----|---|
| Bug Number | QC# | Description |
| 6714 | | Create a table in an Interbase database and fill it with data. Then export the table to a Comma Separated Value file using IBConsole and the export works fine. Check the exported file using MS Excel and it appears to be fine. Then empty the table. But when I try and import data from the .csv file that I exported the table to, I get the following message: Access Violation at address xxxxxxxx in module 'IBConsole.exe' Read of address 00000000. This is the case with any .CSV file that I try to import data from. |
| 63968 | | Database Restore Fails: "No current record for fetch operation" |
| 63637 | | DB Restore can't be done on IBconsole. |
| 74598 | | The name of the directory that contains the IBConsole.xml file is misspelled. |
| 75028 | | When trying to change the data type for a domain, an error appears. |
| 76342 | | Metadata names longer than 22 characters are truncated. |
| 76616 | | When trying to connect as a different user from the InteractiveSQL, the connection window opens but it doesn't connect as a different user and an error message appears. |
| 76622 | | When disconnecting from a database using the InteractiveSQL then trying to reconnect to the database, an error message appears. |
| 79418 | | When using the IBConsole for creating a journal, a journal archive, and to archive the database, the Archive Database option returns an error message (this fails for all types of connections). |
| 79420 | | When creating a journal, a journal archive and a database archive for a database, using Interactive SQL, the 'Archive Database' option doesn't refresh after disconnecting from the database and then reconnecting to the database. |
| 80580 | | IBConsole, Open Table, Error. |
| 81324 | | Interactive SQL in IBConsole: truncated RDB\$ names. |
| 82503 | | When creating a database then a generator using Interactive SQL, an error appears. You then have to use Task Manager to terminate the process. |
| 82706 | | When using a field that can be null in the Primary Key constraint definition, then removing it from there, an error appears. |
| 82776 | | When creating an external function with an entry point larger than 67 chars, an unclear error message shows up. |
| 82829 | | When altering a view to add a second column, the table name is added incorrectly. |
| 82859 | | When altering a trigger by adding a local variable with the same name as another variable, then changing it back to the way it was, the changes cannot be made. |

Table 2.1 Bug fixes for InterBase XE

| For InterBase XE: | | |
|--------------------------|------------|---|
| Bug Number | QC# | Description |
| | 82904 | When choosing a value larger than 10 digits for the input type of a blob filter, an error message shows up and the Blob Filter Editor window closes. |
| | 83369 | When choosing the 'New Connection' option from the Tools menu to connect to a different database then what is running a query, the IBConsole shuts down. |
| | 83370 | When trying to see the License Manager from the Tools menu of the IBConsole, an error message appears. |
| | 83820 | When trying to create a blob filter with a duplicate name, the Cancel button doesn't work. |
| | 83881 | When creating a database with a name that already exists, the 'Cancel' button doesn't work. |
| | 84783 | Text cannot be copied inside the name area of procedures and triggers, even if the focus is inside the name area; the text is added inside the body area. |
| | 84934 | When using the IBConsole to encrypt a database, then deleting the encryption from the system table of encryptions and changing the value of EUA, an AV error message appears. |
| | 85054 | When performing a database sweep using the IBConsole, the text of the confirmation message isn't correctly aligned. |
| | 85104 | For InterBase XE, License Manager from the Tools menu of the IBConsole doesn't open, and an AV error message is shown instead. |
| | 85514 | When using the IBConsole to run a couple of queries without committing, disconnecting the database creates an AV error message. |
| | 86294 | When connecting to a database as sysds0 using IBConsole and trying to view data from a table that the user has select permission on, an error message appears. |
| | 86737 | EUA_USER and EUA_PASSWORD options must be added to Database Restore. |
| | 86739 | IBConsole should be using the new camel-cased and case-sensitive OTW parameter names (for IB OpenSSL clients). |
| | 86749 | SELECT COUNT(*) and SELECT AVG should return a SQL_INT64 type. If there is any code in IBConsole that uses 32-bit integer type local variable to receive this value, it should be changed to a 64-bit integer type. |
| | 86924 | IBConsole requires full path to backup file. |
| Doc Fixes | QC# | Description |

Table 2.1 Bug fixes for InterBase XE

| For InterBase XE: | | |
|--------------------------|------------|---|
| Bug Number | QC# | Description |
| INTB-773 | | Language Reference Guide: Chapter 3: WHEN...DO. Updated GDSCODE errcode. Also updated Table 5.5 with correct GDSCODE usage. |
| INTB-769 | | Operation Guide: Appendix B: Table B.1 <i>InterBase Specifications</i> . Updated maximum size of external table file. |
| INTB-744 | | Developer's Guide: Chapter 14 - <i>Applying Cached Updates with a Dataset Component Method</i> . Replaced old procedure example with a new IBTransaction1 example. |
| INTB-739 | | Language Reference Guide: Chapter 6 - Table 6.34. Added table RDB\$USERS. |
| INTB-736 | | Embedded SQL Guide: Chapter 13- Topic: <i>SQL Datatype Macro Constants</i> . Updated information on sqlsubtype settings. |
| INTB-735 | | Developer's Guide: Chapter 6 - Table 6.7. Updated integer information. |
| INTB-734 | | API Guide: Chapter 3 - <i>Environmental Variables Used by Interbase</i> . Added two new variables: IB_PROTOCOL and INTERBASE. |
| INTB-733 | | Language Reference Guide: Chapter 6 - Topic: <i>RDB\$DATABASE</i> . Added missing fields to table 6.1. |
| INTB-731 | | Language Reference Guide: Chapter 2 - <i>ALTER TABLE, ALTER DATABASE, CREATE ENCRYPTION, CREATE TABLE</i> . Added note to each topic: For detailed information on encryption and decryption, see the topics "Encrypting Data"(page 13-9) and "Decrypting Data" (page 13-11) in the Data Definition Guide. |
| INTB-728 | 22384 | Operation Guide: Chapter 4 - Topic <i>Using ibmgr to Start and Stop the Server</i> . Instructions for starting InterBase under the interbase user account have been updated. |
| INTB-726 | | API Guide: Chapter 5. Added new topic: <i>Use of Commit/Rollback with Multidatabase Transaction</i> . |
| INTB-725 | | Developers Guide: Chapter 6: <i>Explanation of dsc_flags</i> . Added DSC-systems information to Table 6.5. |
| INTB-723 | | Updated installation information. Desktop and ToGo setups are only available for Windows O.S. |
| INTB-722 | | Embedded SQL Guide: Chapter 6 - Topic <i>Using Comparison Operators in Expressions</i> . Added Table 6.4 listing comparison operators in expressions. |
| INTB-720 | 5253 | RAID Issue 171696: Developer's Guide: Chapter 4 - <i>Accessing InterClient extensions to the JDBC</i> . Added a suitable example for how to cast the JDBC driver object in the section. |
| INTB-719 | | RAID Issue 259389: Operation Guide: Chapter 8 - <i>Database Parameter Blocks</i> . isc_dpb_archive_journals and isc_dpb_archive_database not listed in documentation. |

Table 2.1 Bug fixes for InterBase XE

| For InterBase XE: | | |
|-------------------|-----|--|
| Bug Number | QC# | Description |
| INTB-718 | | RAID Issue: 217986: Operation Guide: Appendix A - Topic: <i>New InterBase Keywords</i> . Need the new Keywords introduced in InterBase 7.5 and above. |
| INTB-515 | | The Operations Guide PDF (page 5-10 to 5-12) details the various OTW parameters that can be used by InterBase native and JDBC applications. With InterBase XE, the older named parameters can be removed from the table and ONLY the new ones mentioned. Note, the new OTW parameters are case-sensitive and hence the documentation in the above pages need to be cleaned up with exact camel-casing of OTW parameters. |
| INTB-43 | | Small omission in Language Reference Guide. Field rdb\$depended_on_type and rdb\$dependent_type do not list types 11 and 14. 14 is External Functions. 11 is a generator. |
| | | RAID Issue 112111. Operation Guide: Chapter 11 - Topic <i>Edit</i> . On Windows platforms, EDIT calls the text editor specified by the EDITOR environment variable. If this environment variable is not defined, then EDIT uses the Microsoft mep Notepad editor. |
| | | RAID Issue 251988. Operation Guide: Chapter 9 - <i>Journaling Tips and Best Practices</i> . Updated CHECKPOINT LENGTH information. |
| | | RAID Issue 218084. Language Reference Guide: Chapter 6. TMP\$STATE field not documented in description for TMP\$DATABASE. |
| | | RAID Issue 263959. Data Definition Guide: Chapter 13. gbak examples on page 13-17 have invalid syntax. |
| 23253 | | RAID Issue 238178. Language Reference Guide. Chapter 2. The SQL example for the CASE statement won't work because it is truncated. |
| | | RAID Issue 194123. Language Reference Guide. Chapter 2. Yearday for extract is listed as returning values 1-366. It should say 0-365. Hour and minute are similarly wrong. They are listed as going from 1-23 and 1-59. They should list 0-23 and 0-59. |
| | | RAID Issue 256520. API Guide. Chapter 15. Signature for "isc_dsqli_batch_execute()" incorrectly includes "isc_db_handle *db_handle". Signature for "isc_dsqli_batch_execute()" incorrectly includes declaration using "ULONT" Signature for "isc_dsqli_batch_execute()" incorrectly includes declaration "int dialect" when actually the argument is implemented as an "unsigned short" in ibase.h |
| | | RAID Issue 240455. API Guide. Chapter 15. Guide says isc_string_too_large error is generated when SQL is greater than 64K. 64K should be changed to 2 GB. |

Table 2.1 Bug fixes for InterBase XE

| For InterBase XE: | | |
|--------------------------|------------|--|
| Bug Number | QC# | Description |
| | | RAID Issue 218053. Language Reference Guide. Chapter 2. ALTER DATABASE describes it as "Adds secondary files to the current database." This does not consider other new actions that can now be taken. Changed to "Changes the characteristics of a database". |
| | | RAID Issue 120748. API Guide. Chapter 3. Remove ISC_DATABASE from Table 3.1. It is not implemented any longer. |
| | | RAID Issue 106998. Operations Guide. Chapter 7. Error "OBJECT database_name IS IN USE" is incorrect. |
| 5742 | | RAID Issue 192587. Data Definition Guide. Chapter 8. Documentation says you can't use UNION when creating a VIEW in DSQL. This hasn't been true since IB 5.6. |
| 84435 | | RAID Issue 276427. Data Definition Guide. Chapter 14. UTF_8 Maximum character size is changed from 1 byte to VARCHAR(63). |

Bugs fixed in InterBase 2009 Update 4

The table below lists the bugs that were resolved in InterBase 2009.

Table 2.2 Bug fixes for IB 2009 Update 4:

| For InterBase 2009 Update 4: | | |
|-------------------------------------|------------|--|
| Bug Number | QC# | Description |
| 275463 | | INTB-412: Running delete statement two times causes constraint error, which causes the server to crash. |
| 275462 | | INTB-411: Database corruption reported when deleting records from table with missing foreign key constraint index. |
| INTB-384 | | Indexes entries lost on savepoint rollback for updates across nested savepoints |
| 274857 274858 | | INTB-356: Table's current format descriptor can be garbage collected during sweep. |
| 273917 | | INTB-331: gds32.dll not getting installed in system 32 directory. |
| INTB-305 | | During certification, ibserver often starts claiming errors into the interbase.log recursively until it has taken up the whole disk space. |
| INTB-292 | | Prepared statement query fails on UTF8 database. |

Table 2.2 Bug fixes for IB 2009 Update 4:

| For InterBase 2009 Update 4: | | |
|-------------------------------------|------------|--|
| Bug Number | QC# | Description |
| INTB-281 | | InterBase server crashing with a batchupdate query from Java. |
| 272016 | | INTB-252: Event listener does not work with native OTW connection string in InterBase 2009 Update 2. |
| INTB-249 | | Trying to connect to OTW port without OTW settings causes client hangup. |
| 270898 | | INTB-231: When executing SQL statements, JDBC driver returns SQLWarning beside the normal result, even on success. |
| INTB-230 | | Client crashes on DSQL error when interbase.msg cannot be found. |
| INTB-228 | | Wrong table name: Language Reference Manual, Table 5.3. refers to Table B-4. Should refer to Table 5.4 |

Bugs fixed in InterBase 2009 Update 3

The table below lists the bugs that were resolved in InterBase 2009.

Table 2.3 Bug fixes for IB 2009 Update 3:

| For InterBase 2009 Update 3: | | |
|-------------------------------------|------------|---|
| Bug Number | QC# | Description |
| 263854 | | Hot links from within the PDF documents to other PDF documents come up with an error |
| 267667 | | Page xxxx wrong type (expected 7 and encountered 5) after many hours of stressful INSERT activity from numerous simultaneous clients. |
| 268686 | | InterBase client on Windows Terminal Services reports "Cannot attach to Services Manager" when run for extended period of time, or if the server is subject to intense database activity. |
| 268798 | | Inner join with Stored Procedure that selects from the same table results in "No current record for fetch operation". |
| 269200 | | IBConsole Help is out of date on Windows Vista. |
| 269555 | | Online Dump files have corrupted indexes and page errors when taken from an encrypted database during multi-client activity. |
| 269558 | | Online Dumps are missing one (1) record after multi-client activity. The record is present in the source database, but is not included in the online dump. |

Table 2.3 Bug fixes for IB 2009 Update 3:

| For InterBase 2009 Update 3: | | |
|-------------------------------------|------------|---|
| Bug Number | QC# | Description |
| 270017 | | Multiple clients concurrently executing ALTER TABLE statement against different databases results in client error or hang. |
| 270024 | | InterBase cannot use 2GB+ database cache even if Large Address Aware flag was set Check Operations Guide PDF manual, chapter:InterBase Limits section Various InterBase Limits, Table B.1, for new updates. Search for Maximum number of cache pages per database description. |
| 270284 | | A complicated query involving joins between tables and stored procedures run very slowly. |
| 270396 | | Java clients are unable to connect to databases that require a System Encryption Password, (SEP). |
| 270898 | | When executing SQL statements, JDBC driver returns SQLWarning beside the normal result, even on success. |
| 270959 | | Accessing ODS 10.x database leads to server crash. |
| 271600 | 75561 | "Request Synchronization error" reported on 8-core system with heavy activity. |
| INTB-159 | | OTW/SSL connections do not work via InterBase JDBC driver. Check Developer's Guide PDF manual, chapter "Programming with JDBC" section "SSL file properties" for new updates. |
| INTB-230 | | Client crash on DSQL error when interbase.msg cannot be found. |

Bugs fixed in InterBase 2009 Update 2

The table below lists the bugs that were resolved in InterBase 2009 Update 2.

Table 2.4 Bug fixes for IB 2009 Update 2:

| For InterBase 2009 Update 2: | | |
|-------------------------------------|------------|---|
| Bug Number | QC# | Description |
| 254988 | | Query with explicit and implicit joins results in "no current record for fetch operation" error |
| 256996 | | Distinct in nested queries can return incorrect results |
| 257272 | 65388 | concurrent delete and select (and probably insert) cause database to be corrupted. "internal gds software consistency check (exceeded index level)" error in interbase.log |

Table 2.4 Bug fixes for IB 2009 Update 2:

| For InterBase 2009 Update 2: | | |
|-------------------------------------|------------|---|
| Bug Number | QC# | Description |
| 257670 | 57839 | Join with Stored Procedure returns incorrect results |
| 259585 | | Inner Join between two views which both have left joins results in error "no current record for fetch operation" |
| 260489 | | If journal files are lost, connecting to the database may fail. Fix notes: A new GFIX switch (-disable wal) is provided to disassociate a database from its journal files. No cleanup of the journal files or journal archive files is attempted and it is the case that committed data may have been lost. This could occur because the lost or inaccessible journals may have committed data that was never applied to the database files proper. However, it becomes possible to attach the database to access existing data contained therein. |
| 261953 | | Rogue TCP packet could cause server crash |
| 261974 | | Server crash with big SORTMEM_BUFFER_SIZE on restore |
| 263533 | | OTW: malformed connection string leads to server hang |
| 265145 | | Invalid data entered into a Unicode column hangs client on retrieval operation |
| 265481/2 | | Journaling and encryption combination fails with "decryption of encryption value failed?" |
| 265601 | | Running GBAK as a service incurs high CPU usage in the server |
| 265824 | | Queries based on fields where the character_set_name and collation_name do not match and there is an index return no records |
| 265905 | | Security vulnerabilities exploited by rogue clients |
| 267372 | | InterBase cannot propagate events on both interfaces of a multihomed host |
| 267433 | | Exceptions only displays first 67 characters. They should display 78 characters |
| 267550 | | Server crashes with BUS alignment error on Solaris 10 |
| 267860 | 70915 | Sweep under some conditions causes error "Maximum user count exceeded" and "Request depth exceeded for IRQ_93" in interbase.log |
| 267874 | | Many users doing many inserts causes InterBase server crash with seg fault on Windows or Solaris if there are multiple CPUs |
| 267963 | | After connecting to employee.gdb, subsequent validation of the database with gfix results in interbase.log having numerous "Page xxx is use but marked free" |
| 268016 | | InterBase Services API has problems working on Windows Terminal Services |

Bugs fixed in InterBase 2009 Update 1

The table below lists the bugs that were resolved in InterBase 2009 Update 1.

Table 2.5 Bug fixes for IB 2009 Update 1:

| For InterBase 2009 Update 1: | | |
|------------------------------|-------|---|
| Bug Number | QC# | Description |
| | 65969 | Backup/Restore of encrypted databases not supported in IBConsole |
| 265043 | | Encryption failed when database or column has a character set |
| 265241 | | Re-encrypting a column crashes the server |
| 258311 | | Restore using gbak with buffers set high and -o (one at a time) causes server to crash. |
| | | JDBC: DataBaseMetadata.getTables() does not work with delimited tables/columns |
| | | JDBC: DataBaseMetadata.getTables() wrong ordering of result set |
| | | JDBC: does not recognize InterBase 2009 reserved words |

Bugs fixed in InterBase 2009

The table below lists the bugs that were resolved in InterBase 2009.

Table 2.6 Bug fixes for IB 2009:

| For InterBase 2009: | | |
|---------------------|-------|--|
| Bug Number | QC# | Description |
| 240075 | | Running gfix -validate -full exhibits index corruption messages on table RDB\$DEPENDENCIES. |
| 252301 | | IBMgr Cannot Start Server As A Service When Launched Directly From The Bin Directory. Instead, must be launched from the installed shortcut which passes "InterBase Server Manager [instance = gds_db]". |
| 255784 | 56532 | Running a select statement with specific OR conditions causes the InterBase server to crash. |
| 255847 | | Validating a freshly restored database reports many errors in index RDB\$DEPENDENCIES. |
| 256021 | 56533 | JDBC driver: Calling PreparedStatement.addBatch() more than once results in error when calling PreparedStatement.executeBatch(). |

Table 2.6 Bug fixes for IB 2009:

| For InterBase 2009: | | |
|----------------------------|------------|---|
| Bug Number | QC# | Description |
| 256054 | 53957 | IBServer crash on select from table with date indexes. |
| 257272 | | Concurrent delete and select (and probably insert) cause database to be corrupted. "internal gds software consistency check (exceeded index level)" error in interbase.log. |
| 261546 | 51439 | isc_info_num_buffers returns incorrect information. |

Bugs fixed in InterBase 2007 SP3

For information on InterBase 2007 SP3, please refer to <http://edn.embarcadero.com/article/39103>.

Bugs fixed in InterBase 2007 SP2

The following bugs were resolved in InterBase 2007 SP2:

Table 2.7 Bug fixes for IB 2007 SP2

| For InterBase 2007 SP2: | | |
|--------------------------------|------------|---|
| Bug Number | QC# | Description |
| 58205 | | Improve access method for full outer joins. |
| 58257 | 47598 | Left outer join performance without an index fixed. |
| 58462 | 602721 | Index is not used in a co-related sub select of an UPDATE statement, fixed. |
| 60128 | 47916 | Left outer join with table expressions not optimized when indexes should be used, fixed. |
| 60269 | 20359 | Query Optimization when using "IN" or "OR" keywords fixed. |
| 61347 | 25160 | Index is not used for the where clause when the query is outer join fixed. |
| 219990 | 10264 | Left Join on a big table completion lag fixed. |
| 223805 | 597104 | The optimizer uses a sequential table scan to perform co-related sub-query, fixed. |
| 231879 | 47599 | Data inserted in the last transaction not seen if the database is made read only, resolved. |
| 239883 | 11219 | Installing Desktop Edition as Administrator does not make Programs listing available to other Users, fixed. |
| 243270 | | Connecting with 8.0 client to 7.1 server fails with unavailable database error, fixed. |

Table 2.7 Bug fixes for IB 2007 SP2

| For InterBase 2007 SP2: | | |
|--------------------------------|------------|---|
| Bug Number | QC# | Description |
| 243299 | 40486 | InterBase 7.1 server crashes upon disconnect using 8.0 client with remote connection, fixed. |
| 243679 | 47604 | InterBase Server Manager starts as an ordinary user even if you are an administrator on Windows Vista, fixed. |
| 248755 | | interclient.jar JDBC driver now installed as part of the InterBase SDK. |
| 248850 | | Bookmarks are missing from Language Reference Manual, fixed. |
| 249045 | 47600 | InterBase 2007 Installer now works on SUSE Linux 10. |
| 249232 | | INSERT/COMMIT for each record delay when Journaling is enabled on some Windows platforms fixed. |
| 251265 | 47602 | Query with many joins returns "size of optimizer block exceeded", fixed. |
| 251608 | 44565 | Optimizer block exceeded error fixed. |
| 251610 | 43874 | Bad query result on LEFT JOIN when multiple filters in the join, resolved. |
| 256161 | | Nested loops in triggers crashes the server, fixed. |

Note The table above also contains bug fixes from SP1.

Bugs fixed in InterBase 2007

The following bugs were resolved in InterBase 2007:

Table 2.8 Bug fixes for IB 2007

| For InterBase 2007: | | |
|----------------------------|------------|---|
| Bug Number | QC# | Description |
| 60140 | | Backup and Restore causes problem with adding constraints |
| 112113 | | Invalid 'CREATE SHADOW' statement will cause the ISQL crash. |
| 120473 | | DEFAULT is allowed for BLOBs, but causes errors (such as Conversion error from string "BLOB") when used |
| 122700 | | FOREIGN KEY constraint DDL fails with multiple indices on REFERENCE key |
| 124028 | | IBConsole cannot see the view data |

Table 2.8 Bug fixes for IB 2007

| For InterBase 2007: | | |
|----------------------------|------------|--|
| Bug Number | QC# | Description |
| 124771 | | The error “constraint not found” is raised when one attempts to create a foreign key constraint if the parent table has both a Primary Key constraint and a separate unique index on the referenced column(s) and the name of the unique index sorts before RDB\$PRIMARY |
| 127168 | | InterBase server creates databases without absolute path in System32 directory |
| 148143 | | Instead of getting the normal error message that Field T1 can not be ***NULL*** you get a “conversion error from string “BLOB” “ |
| 157531 | | Obsolete ibconfig parameters included in ibconfig file |
| 169965 | | SELECT * FROM TMP\$PROCEDURES will crash server if a procedure has been dropped |
| 200567 | 7997 | Support to INSERT and UPDATE in BLOB field with Sql command |
| 213125 | | It is impossible to drop a trigger that starts with the name RDB\$ |
| 217985 | | List of System temporary tables (currently page 244) does not list TMP\$HEAPS and TMP\$TRIGGERS |
| 218040 | | Invalid INTERBASE env variable value gives misleading error |
| 228356 | | Allow connection string to a different port to specify a different port number in addition to the port label we already have |
| 230142 | | If you select 'no' for 'run interbase server as a service on Linux', it runs InterBase server as a service on Linux. |
| 237809 | | Better error messages required for database re-routing failures |
| 238414 | | Select after update generates cannot update read-only view error. |
| 238638 | | A connection made via a server alias will fail if other non alias connections are concurrent. |
| 239254 | | Embedded data user authentication section missing from manual. |
| 239622 | 24859 | gds32.dll enhancement, require spb support for instance name |
| 239690 | | Select from view which calls UDF that returns a blob can cause server crash |
| 239730 | 13183 | Alias support for IBConsole |
| 239847 | 28518 | DataDirect ODBC driver doesn't work with SELECT procs with input params |
| 239880 | 14563 | Add support to command select, insert, update on Blob fields |
| 239882 | 11220 | Incomplete entries in Services File |

Table 2.8 Bug fixes for IB 2007

| For InterBase 2007: | | |
|----------------------------|------------|--|
| Bug Number | QC# | Description |
| 239886 | 9014 | Database Alias fails when database already opened via full path |
| 240793 | 31288 | BLOB as (VAR)CHAR functionality failure in Stored Procedures |
| 241006 | | IBConsole crashes when you access "IBConsole help" under the "Help" menu |