Release Bulletin
Sybase® IQ 15.0
for Linux

Document ID: DC10082-01-1500-01

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1. Accessing current release bulletin information

A more recent version of this release bulletin may be available on the Web. To check for critical product or document information added after the product release, use the Sybase Product Manuals Web site.

❖ **Accessing release bulletins at the Sybase Product Manuals Web site**

1   Go to Product Manuals at http://www.sybase.com/support/manuals/.

2   Select a product and language and click Go.

3   Select a product version from the Document Set list.

4   Select the Release Bulletins link.

5   From the list of individual documents, select the link to the release bulletin for your platform. You can either download the PDF version or browse the document online.

2. Product summary

Enclosed is Sybase® IQ 15.0 for Linux.

Refer to the *Installation and Configuration Guide for Linux* for compatible platform and operating system configurations and minimum patch levels.

Refer to the *New Features Guide* document for descriptions of new features and behavior changes in Sybase IQ 15.0.

3. Special installation and migration instructions

For complete installation and migration instructions, see the *Installation and Configuration Guide for Linux*. Be sure to read the chapters "Preparing for Installation" and "Migrating Data" before installing Sybase IQ 15.0.

Before you run a new version of Sybase IQ, see "Restrictions" on page 7 for the most current requirements. This section includes installation and migration information that is new for this release or needs emphasis.

Sybase strongly recommends that you check the online support Web site for software updates to these components before you install the software. If a software update (ESD or EBF) has been released, it contains bug fixes made after this product shipped. You must download the latest update and install it after installing IQ from the product CD. See "Sybase EBFs and software maintenance" on page 22.

3.1 New installer for Sybase IQ 15.0

Previous versions of Sybase IQ used sybinstall to install the product. The Sybase IQ 15.0 interactive installer is a standard installation wizard that lets you set up your software in a graphically-based environment. The interactive installer supports all product editions and installation types. A new silent install option is also available. For more information, see "Installing your software" in Chapter 1, "Preparing for Installation" in the *Installation and Configuration Guide for Linux*.

3.2 Sybase IQ 15.0 requires a license

Sybase IQ 15.0 uses the Sybase Software Asset Management (SySAM) licensing mechanism that provides system administrators with a means to enable and monitor their site's use of Sybase products.

Sybase IQ includes separate SySAM licenses for each product edition and separate licenses for any optional features available for that edition. For more information, see Chapter 2, "Licensing your software" in the *Installation and Configuration Guide for Linux*.

3.3 Sybase Central plug-in compatibility

The Sybase IQ 15.0 plug-in for Sybase Central™ has been upgraded from version 4.3 to version 6.0 and is NOT compatible with previous versions. You can only use the 15.0 plug-in with 15.0 servers; you cannot use the 15.0 plug-in to connect to 12.x servers.

3.4 No Sybase IQ server support on Linux 32-bit

The Sybase IQ 15.0 client is supported on Red Hat 5.2 Linux for 32-bit systems, but there is no Sybase IQ 15.0 server support on Linux for 32-bit systems.

3.5 SDK no longer included

Because Sybase IQ 15.0 now embeds many features provided by the Software Development Kit, the SDK is no longer distributed as part of the product. The SDK is, however, available as a separately purchased option.

3.6 Open Client no longer included

Open Client™ is no longer installed as part of the Sybase IQ product. Sybase IQ 15.0 does provide versions of Open Client utilities that have limited functionality to enable INSERT...LOCATION:

- iqisql

- iqdsedit

- iqdscp (UNIX only)

- iqocscfg (Windows only)

3.7 iqunload -ms_size fails during migration [CR 562705]

If you use the iqunload command line argument -ms_size during migration and specify a size smaller than the required size that Sybase IQ calculates internally, an error similar to the following message may be returned near the end of the migration process:

```
Reload of new IQ_SYSTEM_MAIN Dbspace failed.
Expected values in SYS.SYSIQDBFILE
( 25600, 0, T, T, T, new_main_store.iq ),
actual values are
( 32512, 0, T, T, T, new_main_store.iq ).
```

To correct or avoid this problem:

- Do not specify -ms_size, if the new IQ_SYSTEM_MAIN dbfile is a raw device. Sybase IQ always retrieves the size from a raw device.

- If the new dbfile is a file system file and you have already received this error message, run iqunload again and specify a size greater than the size calculated for your system, as in the example below.

- If you have not run iqunload yet, follow the IQ_SYSTEM_MAIN sizing guidelines in the section "Sizing guidelines for main and temporary store" in Chapter 1, "New Features in Sybase IQ 15.0" in the *New Features Guide*.

The iqunload utility determines that the *new_main_store.iq* needs to be larger than the size specified using the -ms_size option in the command line.

The first number in the list of "actual values" returned in the message above represents the number of blocks required for the migrated database. You can calculate the required size in megabytes (MB) for IQ_SYSTEM_MAIN by performing the following two steps:

1   Determine the existing Sybase IQ 12.7 block size:

```
SELECT block_size FROM sysiqinfo

block_size
8192
```

2   Multiply the block size times the actual number of blocks required, then
     divide by the number of bytes per megabyte:

```
( 8192 * 32512 ) / (1024 * 1024 ) = 254MB
```

IQ_SYSTEM _MAIN in the migrated database must be at least 254MB, which
is larger than the size originally specified in the iqunload -ms_size command
line option.

4. New features and behavior changes

For new features and behavior changes, see *New Features Guide*, which you
should read before you install Sybase IQ 15.0. This section describes changes
that were not included in that book or the documentation set.

Sybase IQ supports many of the new features in SQL Anywhere® 11. For more
information, see *SQL Anywhere 11 – Changes and Upgrading*.

4.1 Start-up and connection changes

This section contains new features and changes related to start-up and
connection.

4.1.1 Stop utility limitation [CR 543495]

The stop_iq utility on UNIX platforms fails to report running servers when the
path to the server exceeds 74 characters.

As a workaround, use a ps -ef command to display servers with long paths. For
example:

```
ps -ef|grep iqsrv

rsmithson 1133     1   0 07:04:32 ?          223:35
/sunsys1234/users/rsmithson/mybigtest1234_withdeletion
_allcol/IQ-15_0/bin64/iqsrv1

rsmithson 2046   862   0 10:02:30 pts/3       0:00 grep
iqsrv
```

4.2 Administration and troubleshooting improvements

This section contains new features and changes related to administration and troubleshooting.

4.2.1 Default password value change

The default password is now sql in lower case.

4.3 Data load, update, and extraction enhancements

This section contains new features and changes related to data load, update, and extraction.

4.3.1 Sybase ETL 4.8 enhancements

Sybase IQ 15.0 is certified with Sybase ETL 4.8, which includes ease of use enhancements for Sybase IQ. Sybase ETL 4.8 is now packaged separately from Sybase IQ.

Sybase ETL 4.8 allows you to bulk-load data from text files located on remote host machines into Sybase IQ 15.0, using the "DB Bulk Load - Sybase IQ" and "IQ Loader File via Load Table" components.

In earlier versions of Sybase ETL, text files were required to be available on the same host machine as the IQ server. Also, Sybase ETL was required to be installed on the same machine as Sybase IQ. In Sybase ETL version 4.8, you no longer need to install Sybase ETL and Sybase IQ on the same machine; the ETL server and Sybase IQ can communicate in a network environment that allows you to bulk-load from a remote machine in a single step.

For more information, see the Sybase ETL 4.8 online documentation at Product Manuals at http://www.sybase.com/support/manuals/.

4.3.2 Inserting default values

Sybase IQ supports the INSERT [INTO] *<tablename>* VALUES(DEFAULT...) syntax.

5. Product compatibilities

This section describes the compatibility of Sybase IQ with other products. Certification with client and partner products is an ongoing process. For the latest information on versions of Sybase products and client application tools that have been certified with Sybase IQ 15.0, refer to the Sybase Web site. See the section "Sybase certifications on the Web" on page 22 for instructions on accessing online certification information.

5.1 Sybase products

The following Sybase products are certified with Sybase IQ 15.0:

•   SQL Anywhere 9.0 or later

•   Adaptive Server® Enterprise 12.5.x and 15.0

•   jConnect™ for JDBC™ 5.x and 6.x

•   Sybase ETL 4.8

Refer to the section "Sybase certifications on the Web" on page 22 for instructions on accessing the latest online certification information.

5.2 Client applications

The following third-party client application tools have been certified with Sybase IQ 15.0. Refer to the section "Sybase certifications on the Web" on page 22 for instructions on accessing the latest online certification information.

•   Cognos

•   Business Objects Crystal Reports

•   MicroStrategy

•   iDashboards

6. Restrictions

Read this section! Your system may produce unexpected results if you ignore the restrictions and other instructions listed below.

The information in this section applies to version Sybase IQ 15.0 servers and databases that have been upgraded from any earlier version of Sybase IQ, unless specified otherwise.

6.1 Single Application Server companion license use [CR 561069]

If you purchase a Single Application Server license and a Single Application Server companion license, the primary server using the Single Application Server license starts and works correctly. However, if you create a multiplex server on the primary server and try to start the secondary server using the Single Application Server companion license, the secondary server does not start. No workaround is available.

6.2 Dbspace management and file placement

When you allocate file system files for dbspaces (System, IQ Main or IQ Temporary), do not place the files on a file system that is shared over a local area network. Violating this rule can lead to poor I/O performance and other problems, including overloading the local area network. On UNIX and Linux platforms, avoid Network File System (NFS) mounted file systems. On Windows, do not place dbspace files on network drives owned by another server.

Dbspace management should be performed by a single database administrator on a single connection to avoid conflicts.

6.3 Query restrictions

By default, Sybase IQ cursors are scrollable, meaning that Sybase IQ keeps all the query results in a buffer so that you can scroll backwards. If the query returns very large numbers (millions) of rows of output, you can improve performance by issuing the following command before running the query:

```
SET TEMPORARY OPTION Force_No_Scroll_Cursors = 'ON'
```

Some front-end applications make use of scrolling cursor operations, however, and require this option to be set OFF. If a front-end tool or an application requires scrolling, but this option is set ON, then you will see error messages like "When Force_No_Scroll_Cursors = 'ON' scrolling cursor operations are not supported."

If scrolling cursors are never used in your application, you should make this option a permanent public option. It will reduce memory usage and make a modest improvement in query performance.

6.4 Unexpected query results

In a few unusual circumstances, differences in semantics between SQL Anywhere and Sybase IQ may produce unexpected query results. These circumstances are:

• A query is issued from inside a user-defined function

• A SELECT statement has no FROM clause

• A FROM clause contains some tables that were created IN SYSTEM and others that were not created IN SYSTEM

In these circumstances, subtle differences between the semantics of SQL Anywhere and Sybase IQ may be exposed. These differences include:

• Sybase IQ treats the CHAR and VARCHAR data types as distinct and different, and SQL Anywhere treats CHAR data as if it were VARCHAR

• The behavior of the RAND function when passed an argument is deterministic in Sybase IQ and non-deterministic in SQL Anywhere

6.5 Interactive SQL restrictions

Sybase recommends that you use the Java edition of dbisql, rather than dbisqlc or isql, unless instructed otherwise for specific tasks. Note that although dbisqlc is supported, dbisqlc does not contain all the features of the Java version dbisql.

• Do not use the Import option in the dbisql Data menu (or Command | Options | Input Format in dbisqlc). This option is not supported for use with IQ databases. Use the LOAD TABLE statement or the INSERT statement to load data into IQ tables.

• If you run dbisql (Interactive SQL Java) with the -q (quiet mode) option, and the data extraction commands (primarily setting the option TEMP_EXTRACT_NAME1 to an output file) are in a command file, you must first set and make permanent the dbisql option "Show multiple result sets." If you do not set this option, the output file is not created.

   To set the "Show multiple result sets" option, click Tools | Options in the dbisql window, choose "SQL Anywhere," and select the "Results" tab. Then select "Show all results sets."

• Online help is not available for dbisql and dbisqlc. [CR 560925]

• The query plan in the dbisql Plan tab is a SQL Anywhere style query plan. For a Sybase IQ query plan, refer to the IQ *.iqmsg* file.

- If you set the terminal type on UNIX and Linux systems to "dumb" or "unknown" and then start dbisqlc, Sybase IQ returns an error. For example:

```
% setenv TERM dumb
% dbisqlc
error at line 1
Unable to initialize screen routines
```

To avoid problems, run dbisql (Interactive SQL Java) instead, or use an xterm window to run dbisqlc on UNIX and Linux systems. For example, you can start an xterm window with a scroll bar as follows:

```
% xterm -sb
```

7. Known problems

For a description of known issues in Sybase IQ 15.0, see the following sections. If there is a workaround for a problem, it is provided. Change request numbers appear in brackets, as in [CR 563004].

See also "Restrictions" on page 7 for more information.

"Documentation updates and clarifications" on page 17 contains details that were not documented in time for this release.

7.1 Sybase IQ operations

This section reports workarounds for issues with Sybase IQ operations.

7.1.1 Restore of raw device with link pathname fails [CR 563004]

If the first IQ_SYSTEM_MAIN dbfile and the first IQ_SYSTEM_TEMP dbfile are raw devices and the pathname in Sybase IQ is a link, then the restore fails to open the raw devices. Instead, RESTORE creates file system files that are the size of the raw devices and restores to these files. When the database is started after the restore, however, the correct paths that point to the raw devices are used.

Raw devices for user dbfiles are restored correctly.

The workaround is to create additional links that point to the raw devices, using the names of the file system files created by RESTORE. After the restore completes, you can delete the extra links.

For example, given the following database:

```
create database 'testdb'
java off jconnect off
iq path '../lnk_5a'
temporary path '../lnk_5d'
```

where

```
lnk_5a -> /sys/rdsk/c4t600A0B80005A7F5D00024
lnk_5d -> /sys/rdsk/c4t600A0B80005A7F5D00025
```

RESTORE fails to open *lnk_5a* and *lnk_5d*. Instead, RESTORE creates the file system files *lnk_5a.iq* and *lnk_5d.iqtmp* that are the size of the raw devices and restores to these files.

For the workaround, you can create additional links named *lnk_5a.iq* and *lnk_5d.iqtmp* that point to the raw devices. Then the restore is successful. You can delete the extra links after the restore completes.

7.1.2 Sample programs may need modification [CR 562633]

The sample programs shipped with IQ in *$IQDIR15/samples/sqlanywhere* may need to be modified to work in your environment. One symptom of this problem is the C ODBC sample program does not compile and "undefined reference" errors are reported.

For Java programs, download JDK 1.6 and possibly other components like jConnect. For C programs, you need the gnu compiler and you need to modify the makefiles in order to compile them in your environment.

7.1.3 iqdsedit fails with translation table syntax errors [CR 558020]

The iqdsedit utility may fail with translation table syntax errors. For example:

```
Warning: translation table syntax error:
Unknown keysym name:  osfActivate
Warning: ... found while parsing
':<Key>osfActivate: ManagerParentActivate()'
Warning: String to TranslationTable conversion
encountered errors
Warning: translation table syntax error: Unknown keysym
name:  osfBeginLine
Warning: ... found while parsing ':<Key>osfBeginLine:
ManagerGadgetTraverseHome()'
```

If iqdsedit reports these errors, the X-server program that renders graphics is not cached or set up in the environment by default.

To resolve this problem, set the environment variable XKEYSYMDB to point to the XKeysmDB file:

    % setenv XKEYSYMDB "/usr/share/X11/XKeysymDB"

For more information about the iqdsedit utility, see "Simplified TDS tools iqdsedit and iqisql" in Chapter 2, "Behavior Changes in Sybase IQ 15.0" in the *New Features Guide*.

7.1.4 Permission denied error accessing a remote table [CR 554600]

A non-DBA user may receive the following error, when accessing a remote table:

    java.sql.SQLException: [Sybase][ODBC Driver]
    [Sybase IQ]Permission denied: you do not have
    permission to insert into ''omni_rset_fetch_table''

The workaround for this problem is to log in as a DBA user and execute the following command:

    GRANT SELECT,INSERT,UPDATE,DELETE
    ON dbo.omni_rset_fetch_table TO PUBLIC

This problem is addressed in a future release.

7.1.5 PATINDEX returns 0 for zero-length search string [CR 475209]

The PATINDEX function should return 1 for a zero-length pattern. PATINDEX, however, returns 0.

7.2 Sybase Central

This section reports workarounds for issues with Sybase Central.

7.2.1 Remote client cannot connect to IQ Agent [CR 563823]

When Sybase Central running on a remote client attempts to connect to the IQ Agent running on the server host, the following error may be reported:

    "Unable to connect to the IQ Agent on Server host
    "<hostname>:<port_number>"

The root cause of this problem may be the configuration of the network, which incorrectly resolves the hostname to loopback IP address 127.0.0.1, rather than the real IP address. You can verify the source of the problem by running the command ping <***hostname***>, which returns an IP address. If the IP address returned is 127.0.0.1, rather than the real IP address of the host, then the network configuration is the problem.

To resolve this issue, ask your system administrator to change the network configuration, so that the hostname is resolved as the real IP address. On a UNIX system, you can edit the system file */etc/hosts*, so that the hostname is resolved to the real IP address.

7.2.2 No Table Page Usage tab for coordinator nodes [CR 560322]

In Sybase Central, when you select the database object, tabs appear in the right pane. The Objects tab is selected by default. In a simplex environment, the Table Page Usage tab also appears.

In a multiplex configuration, however, the Table Page Usage tab is only available for secondary nodes. If you select a database object belonging to a multiplex secondary server, the Table Page Usage tab appears. If you select a database object belonging to the coordinator node, the Table Page Usage tab does not display. Table Page Usage is not applicable to coordinator nodes, as coordinator nodes may have multiple active DBA connections.

7.2.3 Creating proxy tables with "Selected Columns" option [CR 559895]

Creating a proxy table in the Sybase Central wizard with the All Columns option creates the proxy table as expected. However, if you create a proxy table in the Sybase Central wizard with the Selected Columns option, even if you select all columns, the proxy table does not show the data.

The workaround is either to build the proxy table with the All Columns option, or to use dbisql to build the proxy table with just the selected columns that you want.

7.2.4 Sybase Central operation issues [CR 549750]

The following issues with Sybase Central operations while using the Create Database Wizard and browsing for a file on remote systems are related to JRE 6.0. The workarounds are either to enter in the text field the required path name to the file, rather than selecting the file using the wizard, or to run Sybase Central on the system on which you are creating the database.

- Running Sybase Central in either Windows or Linux: you cannot traverse inside a newly created directory, while browsing on a remote system

- Running Sybase Central in Windows: double clicking on directories on a remote Linux system is non-responsive

- Running Sybase Central in either Windows or Linux: the Create New Directory button is disabled, while browsing for files on a remote Linux system

- Running Sybase Central in Linux: while navigating the C: drive on a remote Windows system, if you click the Up > Up > ... button, the listing of files for the C: drive is not correct

- Running Sybase Central on all platforms: renaming a file on a remote system does not work. After you enter the new name and press Enter, there is no response and the rename operation fails without returning an error.

- Running Sybase Central on all platforms: clicking and double clicking files and directories on a remote system does not work as expected. Sometimes Sybase Central navigates into the directory and sometimes it edits the directory name for rename. Similarly for files, sometimes Sybase Central selects the file and some times it edits the file name for rename.

7.2.5 Starting Sybase Central online help on Linux on POWER [CR 390320]

When you use the Help button from a Sybase Central wizard or utility on Linux on POWER, the loading image displays the message "Loading online help," but remains open without starting help. If the image displays in a window with a Close icon (for example, in an Exceed for Windows display), close it manually. If there is no icon, use Alt+F4 (for example, on Solaris CDE display).

Once initialized, the help system works correctly and may subsequently be invoked from wizards or utilities without problems.

8. Documentation for this version

Product packaging has changed for Sybase IQ 15.0. Along with the packaging changes, there are documentation changes. The documentation is now consolidated on two pieces of media. All the information you need to get started and to use the new features in Sybase IQ 15.0 is on the Sybase IQ Getting Started CD and the Sybase IQ Sybooks™ CD.

Table 1 lists documentation on the Sybase IQ 15.0 Getting Started CD.

Table 1: Sybase IQ 15.0 Getting Started CD contents

Part Number	Book Title
DC01014-01-1500-0	*Quick Start*
DC10082-01-1500-01	*Release Bulletin for Linux*
DC10083-01-1500-01	*Installation and Configuration Guide for Linux*

Table 2 lists Sybase IQ documentation on the Sybase IQ 15.0 Sybooks CD.

Table 2: Sybase IQ 15.0 documents on the Sybooks CD

Part Number	Book Title
DC00171-01-1500-01	*New Features Guide*
DC00462-01-1500-01	*Error Messages*

Refer back to the Sybase IQ 12.7 documentation set for syntax and functionality that is unchanged in Sybase IQ 15.0. Table 3 lists Sybase IQ 12.7 documentation available online on the Infocenter Web site Sybooks Online Help at http://infocenter.sybase.com/help/index.jsp and on the Sybase Web site Product Manuals at http://www.sybase.com/support/manuals/.

Updates for Sybase IQ 15.0 to the documents listed in Table 3 will be available in upcoming releases. Check the Infocenter Web site Sybooks Online Help at http://infocenter.sybase.com/help/index.jsp for the latest available versions of the Sybase IQ 15.0 documents.

Table 3: Sybase IQ 12.7 online documents

Part Number	Book Title
DC38159-01-1270-01	*Introduction to Sybase IQ*
DC38151-01-1270-01	*Sybase IQ Reference Manual*
DC00170-01-1270-01	*Sybase IQ System Administration Guide*
DC00169-01-1270-01	*Sybase IQ Performance and Tuning Guide*
DC36584-01-1270-01	*Sybase IQ Troubleshooting and Recovery Guide*
DC00168-01-1270-01	*Sybase IQ Utility Guide*
DC00172-01-1270-01	*Large Objects Management in Sybase IQ*
DC00467-01-1270-01	*Encrypted Columns in Sybase IQ*

Sybase IQ and SQL Anywhere

Because Sybase IQ is an extension of SQL Anywhere, a component of SQL Anywhere Studio®, Sybase IQ supports many of the same features as SQL Anywhere. The IQ documentation set refers you to SQL Anywhere Studio documentation where appropriate. Only a subset of the functionality in the SQL Anywhere documentation is supported by Sybase IQ. For more information, refer to Appendix A, "Compatibility with Other Sybase Databases" in *Sybase IQ Reference Manual*.

You may also need to refer to the following SQL Anywhere 11 documentation, which is included on the Sybooks CD:

• *SQL Anywhere Server – Database Administration* describes how to run, manage, and configure SQL Anywhere databases. It describes database connections, the database server, database files, backup procedures, security, high availability, and replication with Replication Server®, as well as administration utilities and options.

• *SQL Anywhere Server – Programming* describes how to build and deploy database applications using the C, C++, Java, PHP, Perl, Python, and .NET programming languages such as Visual Basic and Visual C#. A variety of programming interfaces such as ADO.NET and ODBC are described.

• *SQL Anywhere Server – SQL Reference* provides reference information for system procedures, and the catalog (system tables and views). It also provides an explanation of the SQL Anywhere implementation of the SQL language (search conditions, syntax, data types, and functions).

The SQL Anywhere 11 documentation is also available online on the Sybase Web site Product Manuals at http://www.sybase.com/support/manuals/ and in DocCommentXchange at http://dcx.sybase.com/dcx_home.php.

Documentation included for Sybase Software Asset Management (SySAM):

- *Users Guide Sybase Software Asset Management (SySAM) 2* introduces asset management concepts and provides instructions for establishing and administering SySAM 2 licenses.

- *SySAM 2 Quick Start Guide* tells you how to get your SySAM-enabled Sybase product up and running quickly.

- *FLEXnet Licensing End User Guide* explains FLEXnet Licensing for administrators and end users and describes how to use the tools which are part of the standard FLEXnet Licensing distribution kit from Sybase.

9. Documentation updates and clarifications

This section contains information omitted from documentation and new information that needs emphasis.

See *New Features Guide* for a description of changes to the Sybase IQ documentation set in version 15.0.

See the online version of the Sybase IQ 12.7 *Release Bulletin for Linux* for documentation updates and clarifications to the Sybase IQ 12.7 online documentation.

9.1 Sybase Central plug-in help

The Sybase Central plug-in contains incorrect references to the sample database. Instead of a sample database, Sybase IQ 15.0 ships a demo database called iqdemo. See "Demo database changes," in the *New Features Guide* for more information.

9.2 Interactive SQL (dbisql) online help

Online help is not available for the utilities Interactive SQL (dbisqlc) and Interactive SQL Java (dbisql).

9.3 New Features Guide

This section contains updates to the *New Features Guide*.

9.3.1 Using the Sybase IQ server after forced recovery [CR 543005]

If you start a Sybase IQ server in forced recovery mode with the start_iq -iqfrec server switch, the server marks all space in use. After this point, no write operations are permitted on the server, until you execute either sp_iqcheckdb 'dropleaks database' or sp_iqcheckdb 'dropleaks <*dbspacename*>', which recovers space that is not in use.

In a multiplex environment, you can start the coordinator with the -iqfrec server start-up switch only in combination with the single node mode only -iqmpx_sn start-up switch. If you try to start the coordinator normally without running sp_iqcheckdb 'dropleaks database' or sp_iqcheckdb 'dropleaks dbspace IQ_SYSTEM_MAIN', the server cannot start. The server needs to truncate and write a new first record to the TLV log, but there is no space available to write the TLV log. If the coordinator fails to start for this reason, restart the coordinator in single node mode and execute sp_iqcheckdb 'dropleaks dbspace IQ_SYSTEM_MAIN', then restart the coordinator normally.

9.4 Installation and Configuration Guide

For updates about installation and migration, including database upgrades, see
"Special installation and migration instructions" on page 2.

10. Technical Support

Each Sybase installation that has purchased a support contract has one or more designated people who are authorized to contact Sybase Technical Support. If you have any questions about this installation or if you need assistance during the installation process, ask the designated person to contact Sybase Technical Support or the Sybase subsidiary in your area.

Before you contact Technical Support

Technical Support needs information about your environment to resolve your problem. Before contacting Technical Support, run the getiqinfo script to collect as much information as possible automatically. You may also need to collect some information manually. Providing this information helps expedite the resolution of your problem.

In the following list, * indicates items collected by getiqinfo:

•   Sybase IQ version (for example, 15.0 GA or ESD level)

- Type of hardware, amount of memory, number of CPUs*

- Operating system and version (for example, Microsoft Windows 2008 Service Pack 1)*

- Operating system patch level

- Front-end tool used (for example, Business Objects Crystal Reports)

- Connectivity protocol used (for example, ODBC, JDBC, Tabular Data Stream™ (TDS))

- Open Client version

- Configuration type (single user or multiuser)

- Message log file* (*very important*)

  Named *dbname.iqmsg*, located by default in the directory where you started the database server

- Stack trace file for the date and time this problem occurred (if applicable)

  Named *stktrc-YYYYMMDD-HHMMSS_#.iq*, located in the directory where you started the database server*

- Command or query that produced the error

- Query plan* (recorded in *.iqmsg* file)

Note The query plan is collected automatically by getiqinfo. If you collect information manually, you must type the following commands and then rerun the command that produced the error:

```
SET TEMPORARY OPTION Query_Plan = 'ON'
SET TEMPORARY OPTION Query_Detail = 'ON'
SET TEMPORARY OPTION Query_Plan_As_Html= 'ON'
SET TEMPORARY OPTION Query_Plan_As_Html_Directory=
'ON'
```

The plan will be in the message log file.

If you have performance problems, set the following option:

```
SET TEMPORARY OPTION Query_Plan_After_Run = 'ON'
```

This enables Technical Support to see which steps in the query processing used the time.

- Server logs

- • For UNIX and Linux: *IQ-15_0/logfiles/<servername>.nnnn.stderr* and *IQ-15_0/logfiles/<servername>.nnnn.srvlog**

- • On Windows platforms:
  %ALLUSERSPROFILE%\SybaseIQ\logfiles\<servername>.nnnn.srvlog*

  For example,
  on Windows 2003 the server log files are located in
  C:\Documents and Settings\All Users\SybaseIQ\logfiles
  and
  on Windows 2008 the server log files are located in
  C:\ProgramData\SybaseIQ\logfiles

- • Start-up and connection option settings, from the configuration file (by default, *dbname.cfg*)*

- • Database option settings and output from sa_conn_properties* (if the server is still running)

- • Schema and indexes for the database

- • Output from sp_iqstatus and sp_iqcheckdb

- • On multiplex databases, you must execute getiqinfo on each node (coordinator and secondary nodes)

- • Screen snapshot of the problem, if possible

A checklist for recording this information for Technical Support is provided at the end of this release bulletin.

For more information on getiqinfo, see "Collecting diagnostic information using getiqinfo" in the *Sybase IQ Troubleshooting and Recovery Guide*.

Online support   You may find additional help from the Sybase online support Web site MySybase at http://www.sybase.com/support/. MySybase is a free service that allows you to search through closed support cases, the latest software bulletins, and resolved and known problems, using a view customized for your needs. You can even open a Technical Support case online.

MySybase can be used from most Internet browsers. Go to the Sybase support home page at http://www.sybase.com/support/ and click the MySybase tab for information on how to sign up for and use this free service.

11. Other sources of information

Use the Sybase Getting Started CD, the SyBooks CD, and the Sybase Product Manuals Web site to learn more about your product:

•   The Getting Started CD contains release bulletins and installation guides in PDF format, and may also contain other documents or updated information not included on the SyBooks CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader, which you can download at no charge from the Adobe Web site using a link provided on the CD.

•   The SyBooks CD contains product manuals and is included with your software. The Eclipse-based SyBooks browser allows you to access the manuals in an easy-to-use, HTML-based format.

    Some documentation may be provided in PDF format, which you can access through the PDF directory on the SyBooks CD. To read or print the PDF files, you need Adobe Acrobat Reader.

    Refer to the *SyBooks Installation Guide* on the Getting Started CD, or the *README.txt* file on the SyBooks CD for instructions on installing and starting SyBooks.

    Note The SyBooks browser software runs on Windows and Linux platforms. Users with non-Linux UNIX platforms must use Acrobat Reader to open PDF files on the SyBooks CD.

•   The Sybase Product Manuals Web site is an online version of the SyBooks CD that you can access using a standard Web browser. In addition to product manuals, you will find links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

    To access the Sybase Product Manuals Web site, go to Product Manuals at http://www.sybase.com/support/manuals/.

•   Infocenter is an online version of SyBooks that you can view using a standard Web browser. To access the Infocenter Web site, go to Sybooks Online Help at http://infocenter.sybase.com/help/index.jsp.

11.1 Sybase certifications on the Web

Technical documentation at the Sybase Web site is updated frequently.

❖ **Finding the latest information on product certifications**

1   Point your Web browser to Technical Documents at
     http://www.sybase.com/support/techdocs/.

2   Click Partner Certification Report.

3   In the Certification Report filter select a product, platform, and timeframe
     and then click Go.

4   Click a Certification Report title to display the report.

❖ **Finding the latest information on component certifications**

1   Point your Web browser to Availability and Certification Reports at
     http://certification.sybase.com/.

2   Either select the product family and product under Search by Base
     Product, or select the platform and product under Search by Platform.

3   Select Search to display the availability and certification report for the
     selection.

❖ **Creating a personalized view of the Sybase Web site (including support
     pages)**

Set up a MySybase profile. MySybase is a free service that allows you to create
a personalized view of Sybase Web pages.

1   Point your Web browser to Technical Documents at
     http://www.sybase.com/support/techdocs/.

2   Click MySybase and create a MySybase profile.

11.2 Sybase EBFs and software maintenance

❖ **Finding the latest information on EBFs and software maintenance**

1   Point your Web browser to the Sybase Support Page at
     http://www.sybase.com/support.

2   Select EBFs/Maintenance. If prompted, type your MySybase user name
     and password.

3   Select a product.

4   Specify a time frame and click Go. A list of EBF/Maintenance releases is displayed.

Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as a Technical Support Contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click Edit Roles to add the "Technical Support Contact" role to your MySybase profile.

5   Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

11.3 Sybase IQ 15.0 Network Clients and ODBC kits available

Sybase IQ 15.0 Network Clients and ODBC kits for development are available on the Sybase download site at http://www.sybase.com/downloads. A Network Client is available for each platform supported by Sybase IQ 15.0.

11.4 IQ Newsgroup

Sybase newsgroups provide a means for users to exchange information over the Internet. The newsgroup for Sybase IQ is sybase.public.iq.

For information on subscribing to Sybase newsgroups, configuring your newsreader or Web browser, and for guidelines on posting, go to Newsgroups at http://www.sybase.com/support/newsgroups.

11.5 IQ User's Group

The IQ User's Group provides a forum for any IQ users to exchange information about Sybase IQ. You can visit the IQUG homepage at http://iqug.dssolutions.com/. To have your name added to the IQ User's Group list, send e-mail to iqug-subscribe@dssolutions.com.

12. Accessibility features

This document is available in an HTML version that is specialized for accessibility. You can navigate the HTML with an adaptive technology such as a screen reader, or view it with a screen enlarger.

Sybase IQ 15.0 and the HTML documentation have been tested for compliance with U.S. government Section 508 Accessibility requirements. Documents that comply with Section 508 generally also meet non-U.S. accessibility guidelines, such as the World Wide Web Consortium (W3C) guidelines for Web sites.

For Section 508 compliant core documentation, see your Sybooks CD or the Infocenter Web site at http://infocenter.sybase.com/help/index.jsp.

For Section 508 compliant installation guides and release bulletins, see the HTML files on your Getting Started CD.

The online help for this product is also provided as HTML-based JavaHelp, which you can navigate using a screen reader.

For information about accessibility support in the Sybase IQ plug-in for Sybase Central, see "Using accessibility features" in the *Introduction to Sybase IQ*. The online help for this product, which you can navigate using a screen reader, also describes accessibility features, including Sybase Central keyboard shortcuts and using this product without a mouse.

For information about how Sybase supports accessibility, see Sybase Accessibility at http://www.sybase.com/accessibility. The Sybase Accessibility site includes links to information on Section 508 and W3C standards.

For a Section 508 compliance statement for Sybase IQ, go to Sybase Accessibility at http://www.sybase.com/products/accessibility.

Note You might need to configure your accessibility tool for optimal use. Some screen readers pronounce text based on its case; for example, they pronounce ALL UPPERCASE TEXT as initials, and MixedCase Text as words. You might find it helpful to configure your tool to announce syntax conventions, or to pronounce certain characters or punctuation such as underscore. Consult the documentation for your tool and see the *Introduction to Sybase IQ* for information on using screen readers. See the following table for pronunciation guidelines for important terms.

Table 4: ABBR and ACRONYM values

Term	Element value
$IQDIR15/bin	dollar I Q D I R fifteen slash bin
iqdemo	I Q demo
DBISQL	D B I sequel
dbname.db	D B name dot D B
dbname.log	D B name dot log
dbname.iqtmp **Note** You can apply this technique to other filenames with extensions.	D B name dot I Q T M P
dbspace	D B space
DSEDIT	D S edit
IDs	I deez
I/O	I O
iq_dummy	I Q underscore dummy
IQ_SYSTEM_MAIN	I Q underscore system underscore main
libtcl.cfg	L I B T C L dot C F G
start_iq	start underscore I Q
start_iq.exe	start underscore I Q dot e x e
SQL	sequel (not S Q L, except when explaining how to pronounce SQL, or when it is what you type, like a password. JAWS reads SQL as S Q L by default.)
®	registered trademark
™	trademark
→	right arrow

13. Checklist: information for Technical Support

You can run the getiqinfo script to collect much of this information.

Information requested	Value
Sybase IQ version (for example 15.0 GA or ESD number)	
sp_iqlmconfig output	
type of hardware	
amount of memory	
number of CPUs	
operating system name and version (for example, Microsoft Windows 2008 Service Pack 1)	
operating system patch level	
front end tool used (for example, Business Objects Crystal Reports)	
connectivity protocol used (for example, ODBC, JDBC, TDS)	
Open Client version	
configuration type (single node or multiplex)	
message log file (dbname.iqmsg)	
server log files (*server.nnn.svrlog* and *server.nnn.stderr*)	
stack trace file (stktrc-YYYYMMDD-HHNNSS_#.iq)	
command or query that produced the error	
start-up option settings	
connect option settings	
database option settings	
schema and indexes for the database	
sp_iqstatus output	

Information requested	Value
query plan: set options (Query_Plan, Query_Detail, Query_Plan_After_Run, Query_Plan_As_Html, Query_Plan_As_Html_Directory, Query_Timing), rerun command or query	
Screen snapshot of the problem, if possible	