

# Release Bulletin Sybase IQ 15.3

**IBM AIX** 

#### DOCUMENT ID: DC74600-01-1530-01

LAST REVISED: May 2011

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# **Product Summary**

This release bulletin provides late-breaking information about Sybase<sup>®</sup> IQ. A more recent version may be available on the Web.

For information about compatible platform and operating system configurations and minimum patch levels, see the *Installation and Configuration Guide*.

For information about new features and behavior changes in this version, see the *New Features Summary Sybase IQ.* 

For information about accessibility, see Accessibility Features in this release bulletin.

# **Product Compatibilities**

Information about the compatibility of Sybase IQ with other products.

These Sybase products are certified with this version of Sybase IQ:

- $jConnect^{TM}$  for JDBC<sup>TM</sup> 5.x and 6.x
- Sybase IQ InfoPrimer 15.3
- Sybase Control Center (SCC) 3.2

These Sybase products are certified to work as backends in CIS functionality with this version of Sybase IQ:

- SQL Anywhere 11.0.1
- Adaptive Server Enterprise 15.5

See *Sybase Product and Component Certifications* for instructions on accessing the latest online certification information.

# **Network Clients and ODBC Kits**

Sybase IQ Network Clients and ODBC kits for development are available on the Sybase download site. A Network Client is available for each platform supported by this version of Sybase IQ.

The Sybase download site is http://www.sybase.com/downloads.

Sybase IQ 15.3 does not require an upgrade of the 32-bit ODBC kits, if you are currently using Sybase IQ 15.2 32-bit ODBC kits.

Product Summary

# Installation and Upgrade

Last-minute information about installation and upgrading that was omitted from or incorrect in your installation guide, or that needs special emphasis.

For detailed information about installing and upgrading Sybase IQ, see the *Installation and Configuration Guide*.

Before you run a new version of Sybase IQ, see *Restrictions* 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 Sybase IQ. See *Downloading Sybase EBFs and Maintenance Reports*.

### New Installer for Sybase IQ 15.3

Sybase IQ 15.3 has a new procedure for installation. The Sybase IQ 15.3 interactive installer is a standard graphical installation wizard. The interactive installer supports all product editions and installation types. A silent installation option is also available. See *Installation and Configuration Guide > Server Installations > Installing Server Software*.

### Sybase IQ 15.3 Requires a License

Sybase IQ 15.3 uses the Sybase Software Asset Management (SySAM) licensing mechanism that lets system administrators 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. See *Installation and Configuration Guide* > *Licensing Your Software*.

### SySAM Licensing Checkout [CR #628594]

If Sybase IQ was licensed using a per-processor license type in previous releases, the license quantity was determined at startup. In this release, Sybase IQ periodically checks the number of processors it can use and attempts to check-out additional licenses for any increase. Sybase IQ shuts down after 30 days, if additional licenses are not made available within this period. See the *SySAM Users Guide* for details regarding license grace.

### ALTER DATABASE UPGRADE Required

To install new system tables, you must run **ALTER DATABASE UPGRADE** on existing databases after installing Sybase IQ 15.3.

For syntax, see Reference: Statements and Options.

### Using remote server classes for ASE [CR #615420]

Component Integration Services (CIS) connectivity from Sybase IQ to Adaptive Server<sup>®</sup> Enterprise (ASE) is available using server classes asejdbc and aseodbc. The asejdbc server class uses the Adaptive Server JDBC<sup>TM</sup> driver and the aseodbc server class uses the Adaptive Server ODBC driver. CIS connectivity through aseodbc server class is expected to provide better performance than the asejdbc class. The Adaptive Server ODBC driver requires a separate installation of SDK 15.5 ESD #8 which can be downloaded from the Sybase EBF download site.

### Increase IQ Temporary Cache Setting for Loads

The LOAD\_MEMORY\_MB option has been deprecated. Instead of setting LOAD\_MEMORY\_MB, you must now adjust the IQ temporary cache setting. The amount to increase the IQ temporary cache is approximately the sum of all the LOAD\_MEMORY\_MB settings of all of the concurrent **LOAD TABLE** executions.

### Creating Dbspaces on Multiple Files

Due to the IBM implementation of reads for JFS database files, Sybase IQ performance improves if you create dbspaces on each disk, instead of creating one large file. Smaller files allow Sybase IQ to handle disk I/O operations much more efficiently, especially when combined with disk striping and possibly multiple controllers.

Currently Sybase recommends that you create three files per underlying disk drive.

When setting up raw partitions, the system administrator specifies the sector size, which defines the minimum usable chunk of disk (and sets the minimum Sybase IQ block size). When you use raw partitions, the integer you specify as a block size for Sybase IQ must be a multiple of the sector size. The *System Administration Guide: Volume 1* provides details on specifying block size.

# **Problem Solutions from Earlier Versions**

Sybase IQ includes solutions to problems that were solved in post-release updates to earlier versions.

Sybase IQ 15.3 contains solutions to problems fixed up to and including these versions:

- Sybase IQ 15.1 ESD #3 (N off #7 Sybase IQ 15.1 ESD #3.7)
- Sybase IQ 15.2 ESD #1 (N off #8 Sybase IQ 15.2 ESD #1.8)
- Sybase IQ 15.2 ESD #2 (N off #3 Sybase IQ 15.2 ESD #2.3 )

# **Sub-Capacity Licensing**

Sybase offers sub-capacity licensing options for Sybase IQ Enterprise Edition. Sub-capacity licensing refers to licensing a Sybase product on a subset of the CPUs available on a physical machine.

### Platform support

Sub-capacity licensing is supported on the following platforms:

Vendor	Product	Platform support	Virtualization Type
НР	nPar	HP IA 11.31	Physical Partition
	vPar		Virtual Partition
	Integrity Virtual Machines with Resource Manager		Virtual Machine
	Secure Resource Partitions		OS Containers
IBM	LPAR	AIX 6.1	Virtual Partition
	dLPAR		Virtual Partition
SUN	Dynamic System Domains	Solaris 10	Physical Partition
	Solaris Containers/Zones with Solaris Resource Manager		OS Partition
INTEL/AMD	VMWare ESX Server <sup>1</sup> Guest OS: Windows	VMWare ESX Server 3.5	Virtual Machine
		Guest OS: Windows 2003	
	VMWare ESX ServerGuest OS:	VMWare ESX Server 3.5	Virtual Machine
	Linux	Guest OS: RH 5.3, SuSE 10	
	Xen <sup>2</sup> , DomainU: Windows	Windows 2003	Virtual Machine
	Xen, DomainU: Linux	RH 5.3, SuSE 10	Virtual Machine
	<sup>1</sup> VMWare excludes VMWare Wor Solaris x64	kstation and VMWare Serve	er <sup>2</sup> Xen excludes Sun

 Table 1. Sub-Capacity Licensing Vendor Support

### How to enable Sybase sub-capacity licensing

You must have a sub-capacity licensing agreement with Sybase before you can enable subcapacity licensing. If you choose to use Sybase IQ in a sub-capacity environment, see the *SySAM Quick Start Guide* for instructions for generating your license key.

Note: Keep your license server up-to-date.

Although the installation media includes a copy of the most recent SySAM license server, Sybase recommends that you periodically check for license server updates on the *SySAM Standalone License Server Install site*.

# Migration from Sybase IQ 12.7

Installation and upgrade information that needs special emphasis for migration from Sybase IQ 12.7 .

For detailed information about installing and upgrading Sybase IQ, see the *Installation and Configuration Guide*.

### Sybase Central Plug-in Compatibility [CR #667451]

Due to security fixes in IQ 15.3, the Sybase IQ 15.3 plug-in for Sybase Central<sup>™</sup> and Sybase Central Agents are not compatible with versions of Sybase IQ earlier than 15.2 ESD #3. You can use the 15.3 plug-in only with Sybase IQ servers that are 15.2 ESD #3 or later, including 15.3; you cannot use the 15.3 plug-in to connect to 12.x servers or servers earlier than 15.2 ESD #3.See *New Features Summary*.

Default Password Value Change The default password is sql in lowercase.

# **Known Issues**

Descriptions of known issues, workarounds, and restrictions.

Find issues by Change Request (CR) number.

**Note:** You can search the Sybase Web site for solved cases. Choose **Support > Solved Cases** or go to *http://search.sybase.com/search/simple.do?mode=sc.* You need a MySybase account to view solved cases in the archive.

### Restrictions

Consider information about restrictions to avoid unexpected results from your system.

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

### Sybase Central Plug-in Compatibility [CR #667451]

Due to security fixes in IQ 15.3, the Sybase IQ 15.3 plug-in for Sybase Central<sup>TM</sup> and Sybase Central Agents are not compatible with versions of Sybase IQ earlier than 15.2 ESD #3. You can use the 15.3 plug-in only with Sybase IQ servers that are 15.2 ESD #3 or later, including 15.3; you cannot use the 15.3 plug-in to connect to 12.x servers or servers earlier than 15.2 ESD #3.See *New Features Summary*.

### Database Name Length Restriction [CR #365281]

The **dbbackup** utility truncates the database name to 70 characters and creates a target file with a truncated name. Sybase IQ uses **dbbackup** when synchronizing secondary servers. Due to **dbbackup** restrictions, database names must be less than 70 characters long.

### 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. Doing so can lead to poor I/O performance and other problems, including overloading the local area network. Do not place IQ dbspace files on network drives or Network File System (NFS) file systems.

To avoid conflicts, Sybase recommends that dbspace management be performed by a single database administrator on a single connection.

### Dbspace Naming in RESTORE Command [CR #561366]

If the dbspace name contains a file extension such as .iq, .iqtmp, or .iqloc, you must enclose the dbspace name in double quotation marks when specifying the name in a **RESTORE** command **RENAME** clause. For example:

```
RENAME local1 TO '/work/local1_res.iqloc.iqloc'
DBSPACENAME "local1_res.iqloc"
```

or

RENAME "test\_prod2.iq" TO '/test/test\_prod7.iq'

#### 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; SQL Anywhere treats CHAR data as if it were VARCHAR.
- When the **RAND** function is passed an argument, the behavior is deterministic in Sybase IQ and nondeterministic in SQL Anywhere.

#### Interactive SQL Restrictions

Sybase recommends that you use **dbisql**, rather than **dbisqlc** or **iqisql**, unless instructed to do otherwise, for specific tasks. **dbisqlc** is supported, but does not contain all the features of **dbisql**.

- Do not use the Import option on 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) 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 option "Show multiple result sets," click Tools | Options in the dbisql window, choose "Sybase IQ," and select the "Results" tab. Under "Results Processing" and "For statements that return multiple result sets," select "Show all result sets."
- There is no online help 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) instead, or use an xterm window to run **dbisqlc** on UNIX and Linux systems. For example, to start an xterm window with a scroll bar, enter:

```
% xterm -sb
```

### **Installation and Configuration**

Descriptions of known issues and workarounds for Sybase IQ installation.

CR#	Description
665300	<ul> <li>Installer stops responding on some UNIX-like platforms – On some UNIX-like operating systems, a network resource may cause the installer to stop responding and return the error "syntax error near unexpected token 'fi'." The df command also stops responding in this situation.</li> <li>Workaround –</li> </ul>
	<ol> <li>Identify the network file system (NFS) mounts that may have problems: strace -e statfs, statfs64 df</li> <li>Use the umount command to unmount an identified NFS mount: umount -1 <path></path></li> <li>Repeat the above steps until there are no more NFS mounts that have stopped responding.</li> <li>Note: The umount command requires root permission. If umount unmounts the NFS, you may have to restart your machine.</li> </ol>
644954	<ul> <li>IQ installer unresponsive during uninstall from Sybase<sup>®</sup> CEP directory – The IQ installer becomes unresponsive when uninstalling Sybase IQ that has been installed in the same top level directory as Sybase CEP R4.</li> <li>Workaround – Before running the IQ installer to uninstall Sybase IQ, create a text file that is greater than 0 bytes in length:</li> <li>Windows: create %SystemRoot%\vpd.properties</li> <li>UNIX: create \$SYBASE/vpd.properties</li> </ul>

Table 2. Installer issues

CR#	Description
669678	<ul> <li>Uninstaller stops responding – Clicking the Previous button after the installer indicates that         All items were successfully deleted         causes the uninstaller to hang.     </li> <li>Workaround – Do not try to return to a previous screen after the installer deletes your files. Click Done to complete the uninstall process.</li> </ul>
641873, 652690, 652696, 652866, 643106	<ul> <li>Do not install Sybase IQ 15.3 into the same directory as older Sybase products – Installing Sybase IQ 15.3 into the same directory with older Sybase Products may render some or all of these products unusable. Only Adaptive Server Enterprise 15.5 and Sybase IQ 15.3 can share the same \$SYBASE directory.</li> <li>Workaround – Install Sybase IQ 15.3 into a different directory than the one you use for older products.</li> </ul>
650943	<ul> <li>Messages not localized for Simplified Chinese – In some language environments, messages are displayed in English, not Simplified Chinese.</li> <li>Workaround – There is no current workaround. Sybase is aware of the problem and will address the issue in a future release.</li> </ul>

# SySAM Licensing

Descriptions of known issues and workarounds for SySAM licensing.

CR#	Description
656959	<ul> <li>CPU count incorrect on IBM AIX with POWER7 processors – Sybase IQ may incorrectly count more cores than are actually present on AIX POWER7 systems when Simultaneous MultiThreading (SMT) is greater than 2 per core. This may result in the Sybase IQ server not starting due to licensing problems or the server may start in grace mode.</li> <li>Workaround – Turn off hyperthreading, configure SMT equal to 2 per core, or contact Sybase Technical Support.</li> </ul>

CR#	Description
669653	<ul> <li>License server reports wrong number of available licenses – When a product requires multiple licenses and the license server has insufficient licenses available to satisfy its needs, the failure message reported by the product does not show the correct amount that were available (that the product could obtain). For example, there are 5 license in a SySAM server, 3 are in use by other host, so only 2 licenses can be obtained. But SySAM will report wrong message "Insufficient IQ_CORE licenses. Sybase IQ requires 4 IQ_CORE licenses but only 5 could be obtained."</li> <li>Workaround – There is no current workaround. Sybase is aware of the problem and will address the issue in a future release.</li> </ul>

CR#	Description
628596, 628403	<ul> <li>Licensing behavior in a virtual environment – Sybase IQ cannot be installed or fails to start in a virtual environment and reports an error similar to the following:</li> <li>Cannot determine the total number of processor cores on the machine from within this virtual system. The IQ_CORE         ("DH") license type is restricted for use on a machine         with a maximum of 4 processor cores regardless of         whether the virtual system is limited to use fewer         processor cores. You need to run 'sysamcap' on the         physical machine (or virtual-machine/partition control         domain) and set the reported environment variable prior         be machine</li> </ul>
	<ul> <li>to running Installer.</li> <li>This error is raised in the following circumstances:</li> <li>1. Sybase IQ is running on a virtual system which doesn't have access to the processor counts of the physical machine (this applies to all virtual environments except AIX LPAR and HP-UX vPar). and</li> <li>2. Sybase IQ is using a license type that is restricted for use to a machine with no more than a specific number of processors (for example, Sybase IQ Single Application Server Edition cannot be used on a machine with more than 16 processor cores, ASE Small Business Edition cannot be used on a machine with more than 2 processor chips).</li> <li>Workaround – Run the sysamcap DEFAULT command on the physical</li> </ul>
	machine or control domain for the virtualization technology (for ex- ample, VMware ESX console, or XEN dom0), then set the environment variable reported prior to running the product or product installer. The process is described in the SySAM Sub-capacity Licensing section of the <i>SySAM Users Guide</i> .

# Sybase IQ Operations

Descriptions of known issues and workarounds for Sybase IQ operations.

### Table 4. Interactive SQL issues

CR#	Description
644210	• Interactive SQL (dbisql) online help is not available – Online help is not available for either the Interactive SQL (dbisql) utility or the dep- recated Interactive SQL Classic (dbisqlc) utility.

CR#	Description
662422	• Remote query performance degrades with DATETIME column – Sybase IQ 15.3 and the default Open Client/Server included with Syb- ase IQ 15.3 support the TDS BIGDATETIME data type for remote queries.
	When a Sybase IQ server executes a remote query using Open Client and fetches a DATETIME column on an IQ/SA remote server, the return data type is BIGDATETIME, instead of DATETIME. This may degrade performance.
	This performance degradation may not occur, when the remote server is an ASE server.
	To prevent the return of BIGDATETIME values, apply this work- around.
	• Workaround – Add these lines to the Open Client and Open Server configuration file \$SYBASE/\$SYBASE_OCS/config/ocs.cfg to prevent the return of BIGDATETIME values:
	[Sybase IQ] CS_CAP_RESPONSE = CS_DATA_NOBIGDATETIME
	See also Open Server 15.0, Open Client 15.0, and SDK 15.0 > Open Client Client-Library/C Reference Manual > Client-Library Topics > Using the runtime configuration file.

### Table 5. Open Client issues

CR#	Description
663054	• Database recovery fails if server started with -iqro 1 flag – A 15.2 database that is archived cannot be recovered if you specify the read-only flag -iqro 1 on the startup command in Sybase IQ 15.3.

#### Table 6. Server startup issues

### Sybase IQ Operations Known Issues from Previous Versions

Descriptions of known issues and workarounds for Sybase IQ operations from previous versions.

#### PHP Bound Parameters on Big Endian Platforms [CR #627872]

In Sybase IQ 15.2, PHP: Hypertext Preprocessor (PHP) drivers on big endian platforms require bound parameters to be initialized before the call to **sasql\_stmt\_bind\_param** for INT and BIGINT data types.

This example shows the values properly initialized before the call to **sasql stmt bind param**:

```
$stmt = sasql_prepare($conn, "insert into
testdefault(c1, c2, c3, c5) values(?,?,?,?)");
#Binding parameters with statement prepared
$c1=22; $c2=33; $c3="col3data"; $c5="col5data";
sasql_stmt_bind_param
($stmt,"iiss", $c1, $c2, $c3, $c5);
#executing statement
sasql_stmt_execute($stmt);
```

# sp\_iqstatus Returns Error on Chinese and Japanese Locale Installations [CR #622928]

On Sybase IQ servers that are set up for Chinese and Japanese locales, running sp\_iqstatus returns an error similar to:

```
Could not execute statement.
Syntax error near '2010' on line 1
SQLCODE=-131, ODBC 3 State="42000"
Line 1, column 1
```

Workaround:

1. Run these commands:

For Chinese locales:

% cd \$IQDIR15/res % rm dblgzh\_iq11\_eucgb.res % rm dblgzh iq11\_cp936.res

For Japanese locales:

```
% cd $IQDIR15/res
% rm dblgja_iq11_eucjis.res
% rm dblgja_iq11_sjis.res
```

2. Restart Sybase IQ.

After this procedure, certain strings in the .iqmsg files and the output of **sp\_iqmpxinfo**, **sp\_iqstatistics**, and **sp\_iqstatus** are in English, instead of Chinese or Japanese.

### ASE Connections to Sybase IQ with BIGDATETIME [CR #622007]

When a version 15.5 GA Adaptive Server Enterprise server uses Component Integration Services (CIS) to connect to a Sybase IQ server version that has BIGDATETIME and BIGTIME capability, any chronological data type sent to the Adaptive Server server using CIS results in the error:

```
Msg 7225, Level 16, State 4:
Line 1:
Unknown datatype token 188 'BIGDATETIME NULL'
encountered.
Exited passthru mode from server 'QA_IQ15_ASECIS'.
```

Sybase IQ sends the data as BIGDATETIME and relies on Adaptive Server to convert appropriately. The BIGDATETIME data type was implemented in CIS in Adaptive Server Enterprise version 15.5 ESD #1, so this error occurs with Adaptive Server Enterprise 15.5 before any ESDs have been applied.

### Workaround:

SET TEMPORARY OPTION RETURN\_DATE\_TIME\_AS\_STRING= 'ON' in Sybase IQ for each session. The Sybase IQ server sends all chronological data as strings and Adaptive Server completes the conversion. This workaround is for Adaptive Server Enterprise 15.5 GA connecting to Sybase IQ in passthrough mode.

You can also use this workaround in the definition of a remote stored procedure, but it is not a solution for proxy tables created on Adaptive Server returning chronological data types from Sybase IQ.

### RSA Certificate Creation Fails [CR #557702]

RSA certificate creation fails with the error createcert command not found because the **createcert** utility is missing. The utility is currently available only on the AIX64, LinuxAMD64, Sun64, and Win32 platforms. Please contact Sybase Technical Support, if you need this utility.

# **Multiplex Environment**

Descriptions of known issues and workarounds for the multiplex environment.

CR#	Description	
666417	<ul> <li>Secondary node unresponsive after emergency shutdown – When a secondary node is not able to resolve a dynamic collision, an emergency shutdown may be necessary. In some circumstances, the server may become unresponsive during this emergency shutdown.</li> <li>Workaround – Kill the server process, resynchronize, and restart the server.</li> </ul>	
666312, 666038	<ul> <li>When DQP is enabled and all servers are participating in DQP there are some known problems you may encounter – When the multiplex coordinator participates in distributed query processing (DQP) under stress conditions, the server may become unresponsive.</li> <li>If a query is using a table which was modified in the same transaction, and has</li> </ul>	
	uncommitted data, and if the worker nodes are heavily loaded, there is a small timing window in which the leader node may abort.	
	• Workaround – To avoid these issues, Sybase recommends you create logical servers to control which servers within the multiplex can participate in DQP. Sybase recommends that the coordinator does not participate in DQP and is not a part of the logical server.	
	In addition, do not run batch loads or transactions that deal with read-write operations like <b>LOAD</b> , <b>INSERT</b> , <b>UPDATE</b> or <b>DELETE</b> in IQ base tables on a logical server that contains more than one physical server. The write batches should run on a single physical machine. By ensuring that all your read-write transactions are done on a single server with the use of logical servers, you will not run the risk of hitting this timing window.	
	The issue can also be prevented by temporarily disabling DQP by calling <b>set temporary option dqp_enabled= 'off'</b> before starting your read-write trans- action, or batch load, and setting it back to <b>'on'</b> only after a commit or rollback.	
665069	• Multiplex reader may become unresponsive trying to access a shared temporary dbspace. – If you add a new file to IQ_SHARED_TEMP that is not visible to a secondary server that is already participating in DQP, it may cause that secondary server to fail.	
	• <b>Workaround</b> – Drop this file from the coordinator and add it back with the file path that is visible to all nodes. Synchronize and restart the secondary nodes.	

### Table 7. Multiplex issues

### Known Issues

CR#	Description		
611990	<ul> <li>Emergency shutdown on secondary servers after CREATE TEXT IN- DEX – A secondary server goes into emergency shutdown, when:         <ul> <li>It is started with the -sf external_library_full_text flag, which disables loading of external libraries, and</li> <li>The user issues a CREATE TEXT INDEX statement on the coordinator with a text configuration that uses external libraries.</li> <li>All other servers replay the DDL successfully.</li> </ul> </li> <li>Workaround – Start secondary nodes in the multiplex without the -sf external_library_full_text flag.</li> </ul>		
557714	<ul> <li>Emergency shutdown on secondary servers after creating a proxy table – A timing problem may cause an emergency server shutdown when a user accesses a new proxy table on a secondary server.</li> <li>Workaround – Either reconnect or wait for some time and start another transaction, before trying to use a newly-created proxy table.</li> </ul>		

# **Sybase Central**

Descriptions of known issues and workarounds for Sybase Central.

### Table 8. Sybase Central issues

CR#	Description	
668606	• Valid IQ Agent username and password returns error in Create Database Wizard – The Sybase Central Create Database wizard fails, when a user creates a new iqdemo database with a valid IQ Agent username and password. This error message is returned:	
	sybase.iq.IQAgentConnectionException: In- valid username. Please provide agent login credentials in Agent Properties window.	
	• Workaround 1 – Uncheck the Create SQL script option in Select IQ Server page.	
	• Workaround 2 – Set Agent username and password in Agent Proper- ties of the server, which is used to create a new database.	

### Sybase Central Known Issues from Previous Versions

Descriptions of known issues and workarounds for Sybase Central from previous versions of Sybase IQ.

*Create Trigger Wizard Does Not Show User Tables [CR #631447]* The Sybase Central Create Trigger Wizard does not list user tables.

Workaround: Use Interactive SQL (dbisql) to create a trigger.

#### Sybase IQ Plug-in Not Registered [CR #629604]

The Sybase IQ plug-in for Sybase Central may not be registered on IBM POWER7 systems running AIX 6.1. A symptom of this problem is these messages in \$IQDIR15/ uninstall/IQ/RegisterIQjpr.out:

ERROR! This file could not be found: jh.jar ERROR! This file could not be found: java

#### Workaround:

You can correct this problem by manually executing Sybase Central and supplying the required configuration command line parameters:

- 1. Open a command prompt or xterm window.
- 2. Change to the Sybase IQ installation directory.
- **3.** Source the environment shell scripts: source IO-15 2.csh
- 4. Change to the directory that contains Sybase Central: cd \$IQDIR15/shared/sybcentral600
- 5. Execute the registration command: scjview -register \$IQDIR15/java/iq.jpr
- 6. Run Sybase Central:

scjview

#### Remote Client Cannot Connect to Sybase IQ Agent [CR #563823]

When Sybase Central running on a remote client attempts to connect to the Sybase IQ Agent running on the server host, this 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.

### 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.

Either build the proxy table with the **All Columns** option, or use **dbisql** to build the proxy table with just the selected columns that you want.

### Sybase Central Operation Issues [CR #549750]

These 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 sometimes it edits the file name for rename.

Known Issues

# **Documentation Changes**

Updates, corrections, and clarifications to the documentation released with Sybase IQ.

# IQ Plug-in Sybase Central Online Help Documentation Changes

Read about updates, corrections, and clarifications to released documentation for the Sybase Central online help for Sybase IQ.

CR#	Description	
664036	• IQ Agent RMI authentication layer – An authentication layer has been implemented between Sybase Central IQ Client and Sybase Cen- tral IQ Agent, which allows only authenticated clients to access Agent's Remote Method Invocation (RMI) methods.	
	• <b>New text</b> – Sybase Central help topics will be updated to accommodate the following behavior changes:	
	<ul> <li>Open Agent properties and enter Agent username and password, if you are performing an operation that requires communication with the IQ Agent.</li> <li>A text box is included for the agent user name and password in all</li> </ul>	
	the property and wizard pages that require the IQ Agent port num- ber.	
	• The default agent user name and password are dba/sql or DBA/sql.	
	• The agent user names and encrypted passwords are saved in a flat file named passfile. This file is located in \$IQDIR15/ java/ and is generated by the installer at install time. Passwords are encrypted using a one way hash.	
	• Only one user name and encrypted password mapping is stored in each line in passfile.	
	• Use a text editor to manually add, remove or change the agent user name and encrypted password in passfile.	
	<ul> <li>Generate an encrypted password using the utility \$IQDIR15/ bin64/passhash.sh.</li> </ul>	
	• Print the corresponding encrypted or hash value by passing a plain- text password as a command line argument:	
	\$ passhash sql \$ Hash: jbbuisadgsuiadgbasjkd89237yer8yhq- wuiofh8923sdf890uy230	
	• Copy and paste the Hash value against the user name in pass-file in this format:	
	username= <hashvalue> Example:</hashvalue>	
	dba=jbbuisadgsuiadgbasjkd89237yer8yhq- wuiofh8923sdf890uy230	
	• Move passfile to another location by changing the absolute path in the login.config file, which is located in \$IQ-DIR15/java/.This path should contain a forward slash "/" as a path separator.	

Table 9. Sybase Central Online Hel	рu	pdates
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### **New Features Summary Documentation Changes**

Read about updates, corrections, and clarifications to released documentation for Sybase IQ new features and behavior changes.

CR#	Description	
670507	• <b>sp_iqcontext Procedure</b> – In <i>Behavior Changes</i> > <i>System Procedure Changes</i> , the document incorrectly states:	
	The <b>sp_iqcontext</b> system procedure column name ConnOrCursor has changed to ThreadType.	
	The column name is ConnOrCursor; the column name has not changed.	
no CR	• Sybase Central IQ Agent RMI Authentication Layer – See Docu- mentation Changes > IQ Plug-in Sybase Central Online Help Docu- mentation Changes for a revised description of New Features > Sybase Central IQ Agent RMI Authentication Layer.	

Table 10. IQ 15.3 New Features Summary issues

# Reference: Building Blocks, Tables, and Procedures Documentation Changes

Read about updates, corrections, and clarifications to released documentation for the SQL, stored procedures, data types, functions, and system tables that Sybase IQ supports.

CR#	Description	
670507	• <b>sp_iqcontext Procedure</b> – The example output incorrectly shows the title ThreadType for the first column. The title of the first column is ConnOrCursor.	
670370	<ul> <li>sp_iqversionuse Procedure – The description of the WasReported value is updated to remove references to SQL Remote.</li> <li>Corrected text – WasReported indicates whether version usage information has been sent from the secondary server to the coordinator. WasReported is 0 initially on a coordinator for new versions.</li> </ul>	

Table 11. Reference: Building Blocks, Tables, and Procedures issues

# System Administration Guide: Volume 1 Documentation Changes

Read about updates to the Sybase IQ System Administration Guide.

CR#	Description
671393	<ul> <li>CommBufferSize Connection Parameter [CBSize] – In Connection and Communication Parameters &gt; Connection Parameters &gt; Comm- BufferSize Connection Parameter [CBSize], the minimum value of CommBufferSize should be 500, not 300.</li> <li>The example should be: To set the buffer size to 500 bytes:</li> <li> CommBufferSize=500</li> <li></li> </ul>
642412	• <b>Troubleshooting Recovery</b> – If you cannot start a server or database in a multiplex, forced recovery may be needed. Use forced recovery only when normal database recovery fails to restore the database to a running state, and only if you see s_buf or free list errors during recovery. Never use forced recovery in response to SA errors, such as SA transaction log replay failure.
	• If you have followed documented recovery procedures and Sybase Technical Support recommends forced recovery, follow these steps:
	<ol> <li>Shut down all secondary nodes using stop_iq.</li> <li>Start the server with the -iqfrec and -iqmpx_sn 1 flags: start_iq -n my_server -x 'tcpip(port=7934}' -gd dba -gm 1 -iqmpx_sn 1 -iqfrec my_db /database/my_db.db</li> <li>Connect to the server and run: sp_iqcheckdb 'dropleaks database' checkpoint</li> <li>Correct errors and rerun sp_iqcheckdb. Repeat until no errors result.</li> <li>Shut down and restart the server normally (without the flags in Step 2).</li> </ol>

Table 12. System Administration Guide: Volume 1 updates

# **Using Sybase IQ Multiplex Documentation Changes**

Read about updates, corrections, and clarifications to released documentation for the Multiplex Grid Option.

CR#	Description	
670370	• <b>sp_iqversionuse</b> – The description of the <b>WasReported</b> value in <i>Mul- tiplex Reference</i> > <i>System Procedures</i> > <i>sp_iqversionuse</i> > <i>Example</i> is updated to remove references to SQL Remote.	
	• <b>Corrected text</b> – WasReported is 0 for versions 42715 and 42728 on the coordinator, because these are new versions that have not yet been replicated.	

Table 13. Using Sybase IQ Multiplex issues

# **Obtaining Help and Additional Information**

Use the Sybase Getting Started CD, Product Documentation site, and online help to learn more about this product release.

- The Getting Started CD (or download) contains release bulletins and installation guides in PDF format, and may contain other documents or updated information.
- Product Documentation at *http://sybooks.sybase.com/* is an online version of Sybase documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. In addition to product documentation, the Web site also has links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, Community Forums/Newsgroups, and other resources.
- Online help in the product, if available.

To read or print PDF documents, you need Adobe Acrobat Reader, which is available as a free download from the *Adobe* Web site.

**Note:** A more recent release bulletin, with critical product or document information added after the product release, may be available from the Product Documentation Web site.

# **Technical Support**

Get support for Sybase products.

If your organization has purchased a support contract for this product, then one or more of your colleagues is designated as an authorized support contact. If you have any questions, or if you need assistance during the installation process, ask a designated person to contact Sybase Technical Support or the Sybase subsidiary in your area.

### Information for Technical Support

Technical Support needs information about your environment to resolve your problem.

Before contacting Technical Support, run the **getiqinfo** script to automatically collect as much information as possible. You may also need to collect some information manually .

In this list, \* indicates items collected by getiqinfo:

- Sybase IQ version (for example, 15.3 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<sup>™</sup> (TDS))

- Open Client version
- Configuration type (single user or multiuser)
- (Important) Message log file\* by default, named dbname.iqmsg and located in the directory where you started the database server
- Stack trace file for the date and time the problem occurred (if applicable), by default named stktrc-YYYYMMDD-HHMMSS\_#.iq and located in the directory where you started the database server\*
- Command or query that produced the error
- Query plan\* (recorded in .iqmsg file)

The query plan is collected automatically by **getiqinfo**. If you manually collect information, enter these commands, then re-run 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 is in the message log file.

If you have performance problems, set this database 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\_3/logfiles/<servername>.nnnn.stderr and IQ-15\_3/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. On Windows 2008, the server log files are located in C:\ProgramData\SybaseIQ\logfiles.

- Startup 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, 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 in this release bulletin.

See System Administration Guide: Volume 1 > Troubleshooting Hints > Reporting Problems to Technical Support > Collecting Diagnostic Information Using getiqinfo.

### **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 15.3 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.nnnn.srvlog and serv- er.nnnn.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	
Query plan: set options (Query_Plan, Query_Detail, Query_Plan_After_Run, Query_Plan_As_Html, Query_Plan_As_Html_Directory, Query_Timing), rerun com- mand or query	
Screen snapshot of the problem, if possible	

# **Downloading Sybase EBFs and Maintenance Reports**

Get EBFs and maintenance reports from the Sybase Web site.

- 1. Point your Web browser to http://www.sybase.com/support.
- 2. From the menu bar or the slide-out menu, under Support, choose EBFs/Maintenance.
- 3. If prompted, enter your MySybase user name and password.
- (Optional) Select a filter from the **Display** drop-down list, select a time frame, and click Go.
- 5. Select a product.

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

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

# **Sybase Product and Component Certifications**

Certification reports verify Sybase product performance on a particular platform.

To find the latest information about certifications:

- For partner product certifications, go to http://www.sybase.com/detail\_list?id=9784
- For platform certifications, go to http://certification.sybase.com/ucr/search.do

### **Creating a MySybase Profile**

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

- 1. Go to http://www.sybase.com/mysybase.
- 2. Click Register Now.

# Sybase IQ Newsgroup

The Sybase IQ newsgroup sybase.public.iq allows users to exchange information over the Internet.

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

# Sybase IQ Users' Group

The Sybase IQ Users' Group provides a forum for 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 Users' Group list, send an e-mail message to *iqug-subscribe@dssolutions.com*.

### **Accessibility Features**

Accessibility ensures access to electronic information for all users, including those with disabilities.

Documentation for Sybase products is available in an HTML version that is designed for accessibility.

Vision impaired users can navigate through the online document with an adaptive technology such as a screen reader, or view it with a screen enlarger.

Sybase HTML documentation has been tested for compliance with accessibility requirements of Section 508 of the U.S Rehabilitation Act. 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.

**Note:** You may 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. Consult the documentation for your tool.

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

You may find additional information about accessibility features in the product documentation.

Obtaining Help and Additional Information