



## **New Features Summary**

# **Sybase IQ 15.3**

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# New Features

New features were introduced in Sybase® IQ 15.3.

## **BIGTIME and BIGDATETIME Support**

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Sybase IQ supports the Adaptive Server Enterprise (ASE) data types **BIGTIME** and **BIGDATETIME** for Component Integration Services (CIS) and **INSERT...LOCATION**.

- Component Integration Services with ASE—aseodbc server class proxy tables mapped to ASE tables that contain columns of data type **BIGTIME** and **BIGDATETIME**.  
When you create a proxy table mapped to an ASE table, a **BIGDATETIME** column is mapped to a **TIMESTAMP** column by default, if no mapping is specified. A **BIGTIME** column is mapped to a **TIME** column by default.  
The asejdbc server class does not support the **BIGTIME** and **BIGDATETIME** data types.
- **INSERT...LOCATION**—the **INSERT...LOCATION** command to load data into Sybase IQ tables from ASE tables that contain columns of data type **BIGTIME** and **BIGDATETIME**.  
Sybase IQ inserts the ASE data type **BIGTIME** into the Sybase IQ data type **TIME**.  
Sybase IQ inserts the ASE data type **BIGDATETIME** into the Sybase IQ data types **DATETIME**, **DATE**, **TIME**, and **TIMESTAMP**.

## **Built-in Web Services Support**

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Sybase IQ provides built-in support for Web services, which allows you to listen to and handle standard SOAP and HTTP requests. You can use Web services as a SOAP or HTTP client to run applications within the database to access standard Web services or other Sybase IQ databases. Use SQL Anywhere stored functions and procedures to access SOAP and HTTP clients.

Sybase IQ Web services introduces the **LIST** function [Aggregate] that lets you dynamically build the HTML content or forms that populate the controls with a set of data for the end user to select.

For information about Web Services and the **LIST** Function, see the following topics in the SQL Anywhere documentation:

- *SQL Anywhere 11.0.1 > SQL Anywhere Server - Programming > SQL Anywhere Data Access APIs > SQL Anywhere web services*

- *SQL Anywhere 11.0.1 > SQL Anywhere Server - SQL Reference > Using SQL > SQL functions > SQL functions (E-O) > LIST function [Aggregate]*

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**Note:** Sybase IQ does not support the iAnywhere WSDL (Web Services Description Language) compiler.

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## Distributed Query Processing

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Distributed Query Processing (DQP) improves performance in IQ multiplex configurations by distributing query processing work across multiple nodes in the logical server.

DQP occurs automatically for qualifying queries. Queries that do not qualify for parallelization are not considered for DQP; therefore, any query that does not run in parallel on pre-15.3 versions of Sybase IQ will not be distributed in 15.3.

DQP introduces the concept of leader and worker nodes.

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**Note:** Do not confuse leader and worker nodes with multiplex coordinator, writer, and reader nodes.

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Query processing work passes from leader nodes to worker nodes and is performed by threads that run on the leader and worker nodes. The leader node can be any node in the logical server where a query originates. A worker node can be any node in the logical server capable of accepting DQP work. The **sp\_iqcontext** system stored procedure provides information about these distributed query processing threads.

In the HTML query plan, DQP eligibility is represented by 3 bars connecting nodes in the plan.

Some query portions are never distributed. Be aware of these DQP limitations:

Query Portion	Distributed?
Read-write query portions (including DDL, INSERT, LOAD, UPDATE, and DELETE).	No
Query portions that reference temporary tables.	No
Query portions that reference SYSTEM dbspace tables.	No
Query portions that reference proxy tables.	No
Query portions that reference nondeterministic functions, such as NEWID.	No

See these topics in the Sybase IQ documentation:

- *Using Sybase IQ Multiplex > Distributed Query Processing*

- *Reference: Building Blocks, Tables, and Procedures > System Procedures > System Stored Procedures > sp\_iqcontext procedure*
- *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements > ALTER LOGIN POLICY*

### See also

- *Logical Servers* on page 3
- *Shared Temporary Stores* on page 5

## Enhanced Parallelism within Queries

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Additional query parallelization and distribution support improves query performance in Sybase IQ 15.3.

Sybase IQ 15.3 increases the types of operators that are automatically parallelized by the Sybase IQ query engine. This feature requires no change in query syntax. No specific tuning is required.

## Logical Servers

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Logical servers provide resource provisioning capability for the Sybase IQ multiplex that lets you group together, and present, a subset of multiplex compute resources (in the unit of a multiplex node) as one logical entity.

Access to Sybase IQ multiplex servers is provided only via logical servers. You can create multiple logical servers to serve different groups of applications or users.

If distributed query processing is enabled when you connect to a multiplex node that is a member of a logical server and run a query, Sybase IQ distributes the query execution to only those nodes that are members of the logical server. You can dynamically add and remove nodes from a logical server to accommodate the individual application resource needs.

See these topics in the Sybase IQ documentation:

- *Reference: Building Blocks, Tables, and Procedures > System Tables and Views > System Views*
- *Reference: Statements and Options > SQL Statements*
- *Using Sybase IQ Multiplex > Distributed Query Processing*
- *Using Sybase IQ Multiplex > Logical Servers*
- *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements*
- *Using Sybase IQ Multiplex > Multiplex Reference > System Tables*
- *Using Sybase IQ Multiplex > Multiplex Reference > System Views*

- *System Administration Guide: Volume 1 > Sybase IQ Connections > Logical Server Configuration*

### See also

- *Distributed Query Processing* on page 2
- *Shared Temporary Stores* on page 5

## Multiplex Interprocess Communication (MIPC)

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MIPC is a fully meshed communication framework that supports distributed query processing and high availability for IQ multiplex servers.

MIPC allows you to configure optional redundant private interconnections for each multiplex node for high performance and high availability.

This private interconnect configuration is currently restricted to physical networks that support the TCP/IP protocol.

See these topics in the Sybase IQ documentation:

- *Installation and Configuration Guide > Preparing for Installation > Planning Your Installation > Planning for Distributed Query Processing or High Availability*
- *Using Sybase IQ Multiplex > Multiplex Overview > Sybase IQ Multiplex Architecture > Communication Infrastructure > Multiplex Interprocess Communication (MIPC)*
- *Using Sybase IQ Multiplex > Distributed Query Processing*
- *Using Sybase IQ Multiplex > Multiplex Reference > System Procedure > sp\_iqmpxinfo Procedure*
- *Using Sybase IQ Multiplex > Multiplex Reference > System Tables and Views > SYSIQMPXSERVER System View*
- *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements > CREATE MULTIPLEX SERVER Statement*
- *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements > ALTER MULTIPLEX SERVER Statement*

## Predicate Evaluation Enhancements

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The evaluation of certain predicates on columns with FP indexes is faster in Sybase IQ 15.3.

This feature requires no change in query syntax. No specific tuning is required.



## Ruby Driver Support

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Sybase IQ supports several Ruby API packages.

- Native Ruby Driver — lets Ruby code interface with Sybase IQ database.
- Ruby/DBI Driver — lets Ruby/DBI communicate with Sybase IQ database.

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**Note:** Sybase IQ does not support Ruby ActiveRecord Adapter API package.

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Sybase IQ support for the Ruby driver is available in both source and binary forms. When no binary distribution is available, you can download and build Ruby from the Internet. The binary distributions are:

- Win32 via the RubyInstaller project (Windows GUI installer)

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**Note:** Sybase IQ does not provide Ruby binary distribution for Windows 64-bit platform. Sybase IQ support for the Ruby driver is provided only for Windows 32-bit and Linux32 (x86) platforms.

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- Linux32 (x86) via the apt-get command, which is available with both Debian and Ubuntu. Enter:

```
% sudo apt-get install ruby irb rdoc
```

For more information on how to download and install rubygems for different Ruby API packages, see <http://sqlanywhere.rubyforge.org/>

See these topics in the SQL Anywhere documentation:

- *SQL Anywhere 11.0.1 > SQL Anywhere Server - Programming > SQL Anywhere Data Access APIs > SQL Anywhere for Ruby > Ruby Support in SQL Anywhere*

## Shared Temporary Stores

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Shared temporary stores communicate and store temporary on-disk structures for distributed query processing.

The shared temporary store is a dbspace that is automatically created when you create a new database. You can create shared temporary stores in databases created in versions earlier than 15.3 by upgrading them.

By default, a shared temporary store has no storage. To enable distributed processing, allocate shared storage for the shared temporary store.

If any of the shared temporary dbspace files cannot be opened, the node starts normally but declares the dbspace dynamically offline. The affected node runs normally but cannot distribute queries or participate in distributed queries.

All multiplex nodes still require local temporary storage. Temporary tables cannot be stored or shared in the shared temporary store. Local and shared temporary stores share the existing temporary buffer caches.

See these topics in the Sybase IQ documentation:

- *Reference: Statements and Options > SQL Statements > ALTER DBSPACE*
- *System Administration Guide: Volume 1 > Database Object Management > Setting up a Sybase IQ Database > Space Allocation > Types of Dbspaces*
- *System Administration Guide: Volume 1 > Database Object Management > Data Storage > Read-only and Read-write Dbspaces and Files > Allowed Dbspace Transformations*
- *Using Sybase IQ Multiplex > Distributed Query Processing*
- *Using Sybase IQ Multiplex > Multiplex Transactions > DDL Commands > Dbspace Updates in Multiplex > Updates on IQ\_SHARED\_TEMP*
- *Using Sybase IQ Multiplex > Multiplex Transactions > DDL Commands > Dbspace Updates in Multiplex > Updates on IQ\_SHARED\_TEMP > Adding Dbfiles to Shared Dbspaces*
- *Using Sybase IQ Multiplex > Multiplex Transactions > DDL Commands > Dbspace Updates in Multiplex > Updates on IQ\_SHARED\_TEMP > Shared File Status Data*
- *Using Sybase IQ Multiplex > Multiplex Reference > System Procedures > sp\_iqmpxfilestatus Procedure*
- *Using Sybase IQ Multiplex > Multiplex Reference > System Procedures > sp\_iqsharedtempdistrib Procedure*

### See also

- *Distributed Query Processing* on page 2
- *Logical Servers* on page 3

## Sybase Central IQ Agent RMI Authentication Layer

In Sybase Central IQ an authentication layer is implemented between the Sybase Central IQ Client and Sybase Central IQ Agent, which allows only authenticated clients to access the agent's Remote Method Invocation (RMI) methods.

As a result of RMI authentication layer implementation, there are some behavior changes in Sybase Central:

- Open Agent properties and enter Agent username and password, if you are performing an operation that requires communication with the IQ Agent.
- Text box is included for agent username and password in all the property and wizard pages that require IQ Agent port number.
- Default agent username and password is `dba/sq1` or `DBA/sq1`.

- Agent username and passwordHash are saved in a flat file `passfile`, which is located in `$IQDIR15/java/` folder and is generated by the installer at install time.
- Only one username and passwordHash is stored in every line.
- You can add, remove or change agent username and password manually using a text editor.
- You can generate a passwordHash using a utility `$IQDIR15/bin/32/passhash.bat` or `$IQDIR15/bin/64/passhash.sh`.
- To print the corresponding hash value, you need to pass a plain-text password as a command line argument:

```
$ passhash sql
```

```
$ Hash:
```

```
jbbuisadgsuiadgbasjkd89237yer8yhqwuiofh8923sdf890uy230
```

- You need to copy and paste the PasswordHash value against username in `passfile` in following format.

```
username=passwordHash
```

- You can move `passfile` to another location by changing the absolute path in `login.config` file.

## User-Defined Functions: Additional Samples

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This version of Sybase IQ includes the user-defined function samples **my\_md5**, **my\_byte\_length**, and **my\_toupper**.

- **my\_md5** calculates the MD5 hash value of an input file (a `LONG BINARY` argument) and processes up to 4GB of input data.
- **my\_byte\_length** measures the size of a column by streaming the data in piece by piece, then returns the size of the column in bytes.
- **my\_toupper** converts to uppercase all alphabetical characters in a `CHAR` column.

In the Sybase IQ documentation, see *User-Defined Functions > Scalar User-Defined Functions*.

### See also

- *User-Defined Functions: Large Object Input Parameter Support* on page 8

## User-Defined Functions: Large Object Input Parameter Support

---

User-defined functions (UDF) support the large object data types `LONG VARCHAR (CLOB)` and `LONG BINARY (BLOB)` as input parameters.

Scalar and aggregate user-defined functions support large object (LOB) data types `LONG VARCHAR (CLOB)` and `LONG BINARY (BLOB)` up to 4GB (gigabytes) as input parameters. LOB data types are not supported as output parameters.

To use LOB data types as input parameters with an existing user-defined function, drop and re-create the function, declaring a LOB data type as an input parameter.

You need not rebuild or recompile an existing user-defined function to use a LOB data type as an input parameter, if the function contains a loop that reads pieces of the value via the `get_value()` and `get_piece()` methods. The loop continues until `remain_len > 0` or until 4GB is reached.

The new sample UDF `my_byte_length.cxx` measures the size of a column by streaming the data in piece by piece using `get_piece()`, then returns the size of the column in bytes. This method ensures that all of the data is read.

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**Note:** Large object data support requires a separately licensed Sybase IQ option.

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See these topics in the Sybase IQ documentation:

- *User-Defined Functions > Creating and Executing User-Defined Functions > SQL Data Types*
- *User-Defined Functions > Scalar User-Defined Functions > Declaring a Scalar UDF > UDF Example: my\_byte\_length Declaration*
- *User-Defined Functions > Scalar User-Defined Functions > Defining a Scalar UDF > UDF Example: my\_byte\_length Definition*
- *Unstructured Data Analytics > Function Support > User-Defined Function Support of Large Object Columns*

### See also

- *User-Defined Functions: Additional Samples* on page 7

# Sybase IQ InfoPrimer - An Option to Sybase IQ

Sybase IQ InfoPrimer, previously known as Sybase ETL, is now packaged and delivered as a separately licensed option to Sybase IQ 15.3, and must be installed using its own installer.

Sybase IQ InfoPrimer provides mechanisms for:

- Extracting data from a datasource, transforming and cleaning the data, and loading it into a Sybase IQ data target using a comprehensive set of transformation functions.
- Extracting and loading data from data sources into Sybase IQ and then performing a set of transformations on the data directly in the Sybase IQ data targets.

Sybase IQ InfoPrimer supports extracting data from multiple heterogeneous data sources namely, Adaptive Server<sup>®</sup> Enterprise, IBM DB2, Oracle, Microsoft SQL Server, Sybase IQ, SQL Anywhere<sup>®</sup>, MySQL, text files, and XML files.

Sybase IQ InfoPrimer offers these new capabilities:

- **Extended high speed extract and load capabilities**
  - Supports large objects (LOB) data from enhanced datasources namely, Sybase ASE, Oracle, Microsoft SQL Server, and files.
  - Enables high-speed bulk extraction from Sybase Adaptive Server, Microsoft SQL Server, and Oracle datasources.
  - Enhances support for generating **LOAD TABLE** commands for existing bulk- load files if they are:
    - Sybase IQ compatible binary format
    - Text files with delimited records
    - Files with fixed length values and variable length records
    - Files in Apache Web log formats (Common Log Format and Extended Log Format)
    - LOBs
    - Text files generated by the extract phase of execution.
  - Continues to support XML, SQL Anywhere, MySQL, Sybase IQ, and IBM DB2 as datasources.
  - Supports parallel loading and transformation of multiple tables.
  - Provides better support for large tables, wide tables, and large number of tables.
  - Supports incremental data changes in existing tables (**insert, update, delete**).
- **Ease of use**
  - Enhances repository performance.
  - Enables fast and easy migration of repositories.
  - Supports full initialization from source to target with and without applied transformation.
  - Supports incremental loads to existing tables with and without transformation.

## Sybase IQ InfoPrimer - An Option to Sybase IQ

- Enhances life cycle management with database connection profiles.
- **Seamless integration with Sybase IQ**
  - Supports table-based, schema-based, and column-based transformation.
  - Supports generation of Sybase IQ **LOAD TABLE** input from a variety of data sources.
  - Enhances support for **Insert Location** capability of the Sybase IQ host.
  - Enhances JavaScript-based transformation support.
  - Supports multiple numbers of transformations within a single load.
  - Supports multiple numbers of load or transformation jobs concurrently.
- **Enhanced licensing capabilities**
  - Supports SySAM sub-capacity licensing.

See this guide in the Sybase IQ documentation:

- *Sybase IQ InfoPrimer Users Guide*

## Sybase Control Center for Sybase IQ

Sybase Control Center for Sybase IQ is a Web-based tool for managing and monitoring Sybase IQ single-node and multiplex servers. The two main features are administration and monitoring.

The Sybase Control Center architecture allows a small number of Sybase Control Center servers to monitor all Sybase IQ servers in an enterprise using the Sybase Control Center agent.

The Sybase Control Center agent is installed with each Sybase IQ server.

Sybase Control Center for Sybase IQ provides availability monitoring, historical monitoring, and real-time monitoring in a scalable Web application that is integrated with management modules for other Sybase products. It offers shared, consolidated management of heterogeneous resources from any location, real-time notification of availability and performance, and intelligent tools for spotting performance and usage trends, all via a thin-client, rich Internet application delivered through your Web browser.

See *Sybase Control Center 3.2.0 > Sybase Control Center for Sybase IQ*.





# Behavior Changes

Behavior changes were introduced in Sybase IQ 15.3.

## Connection and Communication Parameters

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Sybase IQ version 15.3 includes changes to connection and communication parameters.

### *Network Communications Parameters*

These TCP/IP network communications parameters now have maximum allowed values:

- ReceiveBufferSize [RCVBUFSZ]: 1048576 bytes (1MB)
- SendBufferSize [SNDBUFSZ]: 1048576 bytes (1MB)
- Timeout [TO]: 3600 seconds

Values specified above these limits will result in connection failure (-832).

## Changes to Open Client

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Open Client utilities are upgraded to OCS 15.5 in Sybase IQ version 15.3.

See these topics in the Sybase IQ documentation:

- *Utility Guide > iqdsdp Configuration Utility*
- *Utility Guide > iqocscfg Configuration Utility*
- *Utility Guide > isql Interactive SQL Utility*

## Changes to the Sybase IQ Installer

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Sybase IQ installation media supports interactive, console, and unattended (silent) installs.

## Client Driver Upgrades

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Sybase IQ 15.3 includes new JDBC drivers that improve platform support for JDBC applications.

### *New SQL Anywhere Type-2 JDBC drivers*

New SQL Anywhere Type-2 JDBC 3.0 and JDBC 4.0 drivers can connect to Sybase IQ without the need to install or register the SQL Anywhere ODBC driver. The SQL Anywhere

3.0 JDBC Driver requires JRE 1.4 or later; the SQL Anywhere 4.0 JDBC driver requires JRE 1.6 or later.

To use the SQL Anywhere JDBC driver, load the `sybase.jdbc.sqlanywhere.IDriver` class that implements the `java.sql.Driver` interface, and registers the SQL Anywhere JDBC driver with the JDBC DriverManager. After you load the driver, use the **`jdbc:ianywhere:connection-string-parameters`** URL to make connections. The *connection-string-parameters* are the standard connection parameters required to connect to SQL Anywhere

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**Note:** An application no longer needs to specify **DRIVER=** or **DSN=** in *connection-string-parameters* when you use the SQL Anywhere JDBC driver.

---

### *jConnect 7.0 Support*

jConnect 7.0 is a high-performance JDBC driver from Sybase that provides direct access to the complete family of Sybase products. jConnect is an optional installation component.

The jConnect driver is a pure Java solution that uses TDS 5.0 (Tabular Data Stream™, version 5), the native protocol for Adaptive Server and Open Server™ applications. jConnect 7.0 is supported on any platform that provides a Java Virtual Machine that is compatible with the JDBC 4.0 specification.

See these topics in the SQL Anywhere documentation:

*SQL Anywhere 11.0.1 > SQL Anywhere Server - Programming > SQL Anywhere Data Access APIs > SQL Anywhere JDBC driver*

## OLE DB Provider Change

---

The OLE DB provider now requires that you specify the database name as part of a four-part identifier.

The OLE DB provider requires this syntax for identifiers:

```
SELECT * FROM LS153.iqdemo.DBA.emp1
```

The OLE DB provider supported by versions of Sybase IQ prior to 15.3 required this syntax:

```
SELECT * FROM LS152..DBA.emp1
```

Apply a recent EBF to update earlier versions of Sybase IQ with a more recent version of the provider.

See this topic in the SQL Anywhere documentation:

*SQL Anywhere 11.0.1 > SQL Anywhere Server - Programming > SQL Anywhere Data Access APIs > SQL Anywhere OLE DB and ADO development*

## Option Changes

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Sybase IQ version 15.3 includes new login policy options and changes to database options.

- **dqp\_enabled** login policy option added
- **dqp\_enabled** temporary option added
- **max\_connections** login policy option allows multiplex node level overrides
- **locked** login policy option allows multiplex node level overrides

See *Using Sybase IQ Multiplex > Multiplex Reference*.

## SQL Statement Changes

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Sybase IQ version 15.3 includes changes to Interactive SQL.

- The **ALTER DBSPACE** statement has a new **ALTER FILE FORCE READWRITE** clause that changes the status of the specified shared temporary store dbfile to read-write. See *Reference: Statements and Options > SQL Statements > ALTER DBSPACE*.
- The **ALTER LOGIN POLICY** statement has a new **LOGICAL SERVER** clause that configures values of certain login policy options on a per logical server basis. Sybase IQ no longer supports the **MULTIPLY SERVER** clause for login policies. See *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements > ALTER LOGIN POLICY Statement*.
- The following statements are new: **ALTER LS POLICY**, **COMMENT ON LOGICAL SERVER**, **ALTER LOGICAL SERVER**, **CREATE LOGICAL SERVER**, and **DROP LOGICAL SERVER**. See *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements*.
- Java support is now external to the database. The **CREATE DATABASE** clause **JAVA { ON | OFF }** and the **ALTER DATABASE** clauses **JDK** and **REMOVE JAVA** are no longer supported.

Upgrade or change the version of the Java Development Kit (JDK)/Java Runtime Environment (JRE) installed on your system to change the version of Java used by Sybase IQ.

- The **CREATE MULTIPLEX SERVER** and **ALTER MULTIPLEX SERVER** statements now include a **PRIVATE** keyword to specify host and port pairs for private interconnections. A new **PRIVATE NULL** clause for **ALTER MULTIPLEX SERVER** clears the `private_connection_info` column for a server. See *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements*.
- The **DROP MULTIPLEX SERVER** statement has two new clauses – **WITH DROP MEMBERSHIP** and **WITH DROP LOGICAL SERVER**. See *Using Sybase IQ Multiplex > Multiplex Reference > SQL Statements > DROP MULTIPLEX SERVER Statement*.

## System Tables and Views Changes

Sybase IQ version 15.3 includes changes to system tables and views.

Table: ISYSIQLOGICALSERVER View: SYSIQLOGICALSERVER	New
Table: ISYSIQLOGINPOLICYLSINFO View: SYSIQLOGINPOLICYLSINFO	New
Table: ISYSIQLSLOGINPOLICYOPTION View: SYSIQLSLOGINPOLICYOPTION	New
Table: ISYSIQLSMEMBER View: SYSIQLSMEMBER	New
View: SYSIQLSMEMBERS	New
View: SYSIQLSLOGINPOLICIES	New
Table: ISYSIQLSPOLICY View: SYSIQLSPOLICY	New
Table: ISYSIQLSPOLICYOPTION View: SYSIQLSPOLICYOPTION	New
Table: ISYSIQMPXLOGINPOLICYOPTION View: SYSIQMPXLOGINPOLICYOPTION	ISYSIQMPXLOGINPOLICYOPTION table and SYSIQMPXLOGINPOLICYOPTION view no longer exist in Sybase IQ 15.3.
Table: ISYSIQMPXSERVER	New private_connection_info column added.

For details, see *Using Sybase IQ Multiplex > Multiplex Reference > System Views*.

## System Procedure Changes

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Sybase IQ version 15.3 includes changes to system procedures.

### *sp\_iqconnection Procedure Changes*

The **sp\_iqconnection** system procedure includes a new column:

- LSNAME

See these topics in the Sybase IQ documentation:

- *Reference: Building Blocks, Tables, and Procedures > System Procedures > System Stored Procedures > sp\_iqconnection Procedure*
- *Using Sybase IQ Multiplex > Multiplex Reference > System Procedures > sp\_iqconnection Procedure*

### *sp\_iqcontext Procedure Changes*

The **sp\_iqcontext** system procedure column name ConnOrCursor has changed to ThreadType.

The procedure includes a new column:

- Attributes

See this topic in the Sybase IQ documentation:

- *Reference: Building Blocks, Tables, and Procedures > System Procedures > System Stored Procedures > sp\_iqcontext Procedure*

### *sp\_iqmpxinfo Procedure Changes*

The **sp\_iqmpxinfo** system procedure includes new columns:

- SYSIQMPXSERVER.private\_connection\_info
- mipc\_priv\_state
- mipc\_public\_state

In Sybase IQ 15.3, running this procedure from the coordinator returns a row for every node. In earlier versions, it returned a row for the current node only on a secondary node.

See this topic in the Sybase IQ documentation:

- *Using Sybase IQ Multiplex > Multiplex Reference > System Procedures > sp\_iqmpxinfo Procedure*



# Deprecated Features

Learn about features that were deprecated in Sybase IQ 15.3.

## *iqdsedit Utility*

The **iqdsedit** utility is deprecated. Sybase recommends that you use the OCS tool **dsedit** instead. Support for **iqdsedit** is retained for backward compatibility, but support will be removed in a future release.

## *iqisql Utility*

The **iqisql** utility is deprecated. Sybase recommends that you use the OCS tool **isql** instead. Support for **iqisql** is retained for backward compatibility, but support will be removed in a future release.

## Deprecated Features