

Release Bulletin for jConnect™ for JDBC™ Version 6.0

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Topic	Page
1. Accessing current release bulletin information	2
2. Product summary	2
3. Special installation instructions	3
3.1 Check your jConnect for JDBC version	3
3.2 Remove old versions of jConnect for JDBC	4
4. Special upgrade instructions	4
4.1 Migration	4
4.2 Version setting	5
4.3 JDK 1.4	5
5. Changed functionality in this version	5
5.1 Kerberos authentication	5
6. Known problems	5
6.1 IOException for setBinaryStream	6
6.2 Output from queries with errors	6
6.3 Row locks for non-indexed tables	6
6.4 setCharacterStream	6
6.5 allTablesAreSelectable method	6
6.6 Handling numeric errors returned as warnings	6
7. Documentation updates and clarifications	7
8. Technical support	8

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Topic	Page
9. Other sources of information	8
9.1 Sybase certifications on the Web	8
9.2 Sybase EBFs and software maintenance	9

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 release of the product CD, use the Sybase™ Technical Library Product Manuals Web site.

❖ Accessing release bulletins at the Technical Library Product Manuals Web site

- 1 Go to Product Manuals at <http://www.sybase.com/support/manuals/>.
- 2 Follow the links to the appropriate Sybase product.
- 3 Select the Release Bulletins link.
- 4 Select the Sybase product version from the Release Bulletins list.
- 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 jConnect™ for JDBC™ version 6.0.

jConnect for JDBC is an implementation of the Java JDBC standard. It provides Java developers native database access in multitier and heterogeneous environments. You can download jConnect for JDBC quickly, without previous client installation, for use with thin-client Java applications.

jConnect for JDBC provides high-performance, direct access to the complete family of Sybase products, including Adaptive Server® Enterprise, Adaptive Server Anywhere™, Adaptive Server IQ™ (formerly Sybase IQ™), and Replication Server®.

Note Sybase uses the names Adaptive Server and Adaptive Server Enterprise to refer to all supported versions of Adaptive Server Enterprise.

jConnect for JDBC offers:

- JDBC 2.x standards compliance

Note jConnect 6.0 has not yet implemented any JDBC 3.0 methods. This functionality is to be implemented incrementally in future EBF releases. See the *Programmer's Reference* for more information.

- Native protocol support
- No client installation
- Multitier configurations

jConnect for JDBC provides:

- Interoperability with other JDBC drivers
- High-performance direct database access
- Zero-client installation
- Heterogeneous and legacy database support
- Portability across any Web server and Java-enabled client
- Scalability for business-critical applications
- Security and reliability

3. Special installation instructions

Check the Sybase download Web site for the most recent version of jConnect for JDBC:

<http://www.sybase.com/products/middleware/jconnectforjdbc>

3.1 Check your jConnect for JDBC version

To check the exact build version of an existing jConnect for JDBC installation, execute the following command from your `$JDBC_HOME/classes` directory on UNIX or your `%JDBC_HOME%\classes` directory on Windows:

```
java -jar jconn3.jar
```

This command prints a version string like the following:

```
jConnect (TM) for JDBC(TM) /6.0 (Build  
25200/P/EBF11817/JDK14/Tue Mar 9 15:18:30 2004
```

Here the version number is 6.0. The 5-digit number following the letters "EBF" indicates the exact version of jConnect for JDBC. This number increases as subsequent EBFs are released. If there is a more recent version of jConnect for JDBC available on the Sybase download Web site, download and use the latest version.

3.2 Remove old versions of jConnect for JDBC

If you have downloaded the latest version of jConnect for JDBC 6.0, use the following procedure to remove your old jConnect for JDBC 6.0 installation.

❖ Removing an old version of jConnect for JDBC

- 1 Delete the *jConnect-6_0* folder in the *\$SYBASE* directory.
- 2 Extract the *zip* file containing the latest version of jConnect for JDBC into the *\$SYBASE* directory.
- 3 Reinstall jConnect for JDBC metadata on your database using the proper script included with the latest version of jConnect for JDBC. For example, use the *sql_server12.5.sql* script for Adaptive Server Enterprise versions 12.5.x. For complete instructions, see the jConnect for JDBC *Installation Guide*.

Note To upgrade from jConnect for JDBC 5.5 to the latest version of jConnect for JDBC 6.0, you are not required to remove the *jConnect-5_5* directory.

4. Special upgrade instructions

Read this section if you are upgrading to jConnect for JDBC 6.0 from a previous version. For more detailed information, see the jConnect for JDBC *Programmer's Reference*.

4.1 Migration

The driver code for jConnect for JDBC 6.0 resides in *jconn3.jar*. Your application CLASSPATH variable should point to this new file at *jConnect-6_0/classes/jconn3.jar*. If you are upgrading from jConnect for JDBC 5.x and wish to use the jConnect for JDBC 6.0 driver with an existing application, you may also need to change your application code.

See Chapter 6, “Migrating jConnect Applications” in the *jConnect for JDBC Programmer’s Reference* for complete details.

4.2 Version setting

The default version setting for the jConnect for JDBC 6.0 driver is “6”. If you use *jconn3.jar* with existing applications, you may experience unwanted behavior changes. To use the jConnect for JDBC 6.0 driver while maintaining version 5.x behavior, set the `JCONNECT_VERSION` property to “5”.

Note By setting the `JCONNECT_VERSION` property to “5” in jConnect for JDBC 6.0, you are not using the full capabilities of jConnect for JDBC or the database servers to which you connect.

4.3 JDK 1.4

To compile and execute applications using jConnect for JDBC 6.0, you must use JDK version 1.4.0 or later.

5. Changed functionality in this version

This section summarizes new and changed functionality in jConnect for JDBC.

5.1 Kerberos authentication

You can use Kerberos to authenticate Java applications or users of Java applications to Adaptive Server Enterprise without sending user names or passwords over a network. You can also use Kerberos to set up a Single Sign-On (SSO) environment and provide mutual authentication between the digital identity of a Java application and that of Adaptive Server Enterprise.

For more information, see the *jConnect for JDBC Programmer’s Reference*.

6. Known problems

This section describes problems that are scheduled to be fixed in a future release of jConnect for JDBC.

6.1 IOException for setBinaryStream

If there is an IOException for the input stream specified in a setBinaryStream method call for a prepared statement, improper cleanup of the connection may result in an error for the subsequent command.

This issue concerns CR #343354.

6.2 Output from queries with errors

A query that results in an error does not return output, even though some results may exist for the query.

This issue concerns CR #342782.

6.3 Row locks for non-indexed tables

Threaded applications fail to acquire row locks on tables that have no unique indexes.

This issue concerns CR #342599.

6.4 setCharacterStream

jConnect may create an incorrect TDS stream for a parameter when using the setCharacterStream method of the PreparedStatement class.

This issue concerns CR #345719

6.5 allTablesAreSelectable method

The allTablesAreSelectable method of the DatabaseMetaData class returns “0” for Adaptive Server Enterprise and “1” for Adaptive Server Anywhere.

This issue concerns CR #202606.

6.6 Handling numeric errors returned as warnings

In ASE 12.0 through 12.5, numeric errors are handled by default as severity 10. A severity-level 10 message is classified as a status information message, not as an error, and its content is transferred in a SQLWarning object. The following code excerpt illustrates this processing:

```

static void processWarnings(SQLWarning warning) {
    if (warning != null) {
        System.out.println ("\n -- Warning received -- \n");
    } //end if
    while (warning != null) {
        System.out.println ("Message: " + warning.getMessage());
        System.out.println ("SQLState: " + warning.getSQLState());
        System.out.println ("ErrorCode: " + warning.getErrorCode());
        System.out.println ("-----");
        warning = warning.getNextWarning();
    } //end while
} //end processWarnings

```

When a numeric error occurs, the `ResultSet` object returned contains no result set data, and the relevant information concerning the error must be obtained from the `SQLWarning`. Therefore, in a JDBC application, the code that checks for and processes a `SQLWarning` should not depend on there being a result set. For example, the following code checks for and processes `SQLWarning` data both inside and outside the result set processing while loop:

```

while (rs.next()) {
    String value = rs.getString(1);
    System.out.println ("Fetched value: " + value);

    // Check for SQLWarning on the result set.
    processWarnings (rs.getWarnings());
} //end while

// Check for SQLWarning on the result set.
processWarnings (rs.getWarnings());

```

Here the code checks for `SQLWarning` even if there is no result set data (`rs.next()` is false). The following example is output for a program properly written to detect and report numeric errors. The error is a division by zero:

```

-- Warning received --

Message: Divide by zero occurred.
SQLState: 01012
ErrorCode: 3607

```

7. Documentation updates and clarifications

For general information on setting up Kerberos, see the whitepaper at the following URL:

<http://www.sybase.com/detail?id=1029260>

8. 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.

9. Other sources of information

Use the Sybase Getting Started CD, the Sybase Technical Library CD, and the Technical Library 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 Technical Library CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader (downloadable at no charge from the Adobe Web site, using a link provided on the CD).
- The Technical Library CD contains product manuals and is included with your software. The DynaText reader (included on the Technical Library CD) allows you to access technical information about your product in an easy-to-use format.

Refer to the *Technical Library Installation Guide* in your documentation package for instructions on installing and starting the Technical Library.

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

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

9.1 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 Select Products from the navigation bar on the left.
- 3 Select a product name from the product list and click Go.
- 4 Select the Certification Report filter, specify a time frame, and click Go.
- 5 Click a Certification Report title to display the report.

❖ 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.

9.2 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. Enter user name and password information, if prompted (for existing Web accounts) or create a new account (a free service).
- 3 Select a product.
- 4 Specify a time frame and click Go.
- 5 Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

