Release Bulletin
jConnect™ for JDBC™ 7.0

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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 jConnect™ for JDBC™ version 7.0.

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

jConnect provides high-performance, direct access to the complete family of Sybase products, including Adaptive Server® Enterprise, SQL Anywhere®, Sybase IQ, and Replication Server®.

To learn about jConnect 7.0 and its features, see the *jConnect for JDBC 7.0 Programmers Reference*.

3. Special installation instructions

See the Sybase download site for jConnect for JDBC at http://www.sybase.com/products/allproductsa-z/softwaredeveloperkit/jconnect for the most recent version of jConnect.

3.1 Check your jConnect version

To check the exact build version of an existing jConnect installation, execute this command from *$JDBC_HOME/classes* (UNIX) or *%JDBC_HOME%\classes* (Windows):

```
java -jar jconn4.jar
```

This command prints a version string such as:

```
jConnect (TM) for JDBC(TM)/7.00(Build 26464)/P/
EBF17270/JDK16/Sun Oct 11 7:47:00 2009
```

Here, the version number is 7.0. The 5-digit number following the letters "EBF" indicates the exact jConnect version. This number increases as subsequent EBFs are released. Download and use the latest version.

4. Special upgrade instructions

Read this section if you are upgrading to jConnect for JDBC 7.0. For detailed information, see the *jConnect for JDBC Programmers Reference*.

4.1 Migration

The driver code for jConnect 7.0 resides in *jconn4.jar*. Your application CLASSPATH variable should point to *jConnect-7_0/classes/jconn4.jar*. If you are upgrading from jConnect 5.*x* or 6.*x* and want to use jConnect 7.0 with an existing application, you may also need to change your application code.

See "Migrating jConnect Applications" in the *jConnect for JDBC Programmers Reference*.

4.2 Version setting

The default version setting for the jConnect 7.0 driver sets the JCONNECT_VERSION property to 7.0. If you use *jconn4.jar* with existing applications, you may experience unwanted behavior changes. To use jConnect 7.0 and still maintain version 6.05 behavior, set the JCONNECT_VERSION property to 6.05.

Note By setting the JCONNECT_VERSION property to 6.05 in jConnect 7.0, you are not using the full capabilities of jConnect 7.0 or the database servers to which you connect.

4.3 JDK 6

To execute applications using jConnect 7.0, use JDK version 6 or later.

5. Changed functionality in this version

A description of the new features in jConnect 7.0 can be found in the *Open Server and SDK New Features for Windows, UNIX, Linux, and Mac OS X.*

6. Known problems

This section describes known problems in jConnect.

6.1 Missing *sql_asa10.sql* and *sql_asa11.sql* scripts

Software Developer's Kit (SDK) 15.5 and jConnect 7.0 do not include *sql_asa10.sql* and *sql_asa11.sql*, which creates stored procedures that allow jConnect to access the metadata of SQL Anywhere 10 and SQL Anywhere 11, respectively. The metadata allows jConnect to function properly with SQL Anywhere.

Workaround: To get a copy of *sql_asa10.sql* or *sql_asa11.sql*, download and install jConnect 7.0 ESD #1. Alternatively, you can use *jcatalog.sql*, which is located in the SQL Anywhere directory *$SA_ROOT/scripts/.*

6.2 Unsupported JDBC functions

The following functions are not supported and will throw NotImplemented Exception. Support for these functions will be incrementally added in future ESD releases:

- For JDBC 2.0:

```
Connection.getTypeMap();
Connection.setTypeMap(java.util.Map typeMap);
PreparedStatement.setNull(int index, int sqlType, String typeName);
CallableStatement.getObject(int index, java.util.Map typeMap);
CallableStatement.getObject(String parameterName,
 java.util.Map typeMap);
ResultSet.getObject(int index, java.util.Map typeMap);
ResultSet.getObject(String columnName, java.util.Map typeMap)
ResultSet.isLast();
```

- For JDBC 3.0

```
CallableStatement.setURL (String parameterName, URL val)
DatabaseMetaData.supportsStatementPooling();
PreparedStatement.setURL (int parameterIndex, URL x)
ResultSet.getURL(int index);
ResultSet.getURL(String columnName);
```

- For JDBC 4.0, see *jConnect for JDBC 7.0 Programmers Rereference*.

6.3 Stored procedures executed from JDBC clients

[CR #39647]   When you execute a stored procedure from a JDBC client, and the stored procedure returns output parameters and calls the Transact-SQL® function "tsequal," you will not be able to determine the results.

Workaround: Set JCONNECT_VERSION to 5 or earlier.

6.4 IOException for setBinaryStream

[CR #343354]   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.

6.5 Output from queries with errors

[CR #342782]   A query that results in an error does not return an output, even if a result exists for the query.

6.6 allTablesAreSelectable method returns incorrect information

[CR #202606]   The allTablesAreSelectable method of the DatabaseMetaData class always returns 0 for Adaptive Server and 1 for SQL Anywhere.

6.7 Handling numeric errors returned as warnings

In Adaptive Server 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 to a SQLWarning object. This code illustrates this processing:

```
static void processWarnings(SQLWarning warning) {
    if (warning != null) {
```

```
      System.out.println ("\n -- Warning received -- \n");
   }
   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();
   }
}
```

When a numeric error occurs, the returned ResultSet object does not contain result set data, and you must retrieve the error information from SQLWarning. Therefore, in a JDBC application, the code that checks for and processes a SQLWarning should not expect a result set. For example, this 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());

}

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

The preceding code checks for SQLWarning even if there is no result set data (rs.next( ) is false).

This is an output of a program that detected an error caused by dividing a number by zero:

```
      -- Warning received --

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

7. Documentation updates and clarifications

7.1 JDK version

The *jConnect for JDBC 7.0 Programmers Reference* and the *Software Developer's Kit 15.5 Installation Guide* for your platform document that jConnect 7.0 requires JDK version 1.6 or later to work properly. Officially, Sun Microsystems refers to this version as JDK 6.

7.2 Configuring Kerberos

For information about setting up Kerberos, see the Configuring Kerberos for Sybase white paper at 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 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.

• 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/.

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   Click Partner Certification Report.

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

4   Click a Partner 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.

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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. If prompted, enter 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.

10. 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.

jConnect for JDBC Version 7.0 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.

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

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. Consult the documentation for your tool.

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.