BEA WebLogic
Adapter for
RDBMS

Release Notes

Release: 8.1.2
Document Date: January 2004

Contents

1. BEA WebLogic Adapter for RDBMS Release Notes

A. Supported Drivers

BEA WebLogic Adapter for RDBMS Release Notes

BEA WebLogic Adapter for RDBMS Release 8.1.2
Release Date: January 2004
Revised: June 2004

Change History

Date	Summary of Changes
June 2004	• Revision to documentation. Information about the namespace enforcement option, which is avilable in WebLogic Integration 8.1 Service 2 or later, is now included on "Defining Event Connection Parameters" on page 2-18 of the *User Guide*.
Jaanuary 2004	▪ Initial Release of WebLogic Adapter for RDBMS 8.1.2

This document includes the following topics:

- About This Release of the BEA WebLogic Adapter for RDBMS

- What's New in BEA WebLogic Adapter for RDBMS Release 8.1.2

- Software Requirements

- Determining the Adapter Version

- Problems Fixed in This Release

- Known Limitations

- Contacting BEA Customer Support

About This Release of the BEA WebLogic Adapter for RDBMS

The BEA WebLogic Adapter for RDBMS connects to your RDBMS so that you can easily use your RDBMS data and functions within your business processes. The adapter provides scalable, reliable, and secure access to your RDBMS.

The adapter supports the following services and events:

- Services
  - Standard SQL
  - Parametrized SQL
  - Stored Procedure
  - Arbitrary SQL
- Events
  - Trigger
  - Select By Timestamp
  - Select Then Delete

What's New in BEA WebLogic Adapter for RDBMS Release 8.1.2

WebLogic Adapter for RDBMS release 8.1.2 adds support for several performance and feature enhancements, including the following:

- Auto suspend and resume functionality

  The adapter supports the auto suspend/resume functionality provided as part of the fault-tolerant features of the BEA WebLogic Platform. For more information about using these high availability features in WebLogic Integration solutions, see the following URL:

  http://edocs.bea.com/wli/docs81/deploy/highav.html

- Clustered deployment of event generators

  You can deploy Message Broker event generator instances on multiple managed servers in a WebLogic Integration cluster to improve load balancing and fault tolerance in your WebLogic Integration applications. For information about configuring event generators in a cluster, see "Event Generator Resources" in "Key Deployment Resources" in Introduction in *Deploying WebLogic Integration Solutions* at the following URL:

  http://edocs.bea.com/wli/docs81/deploy/intro.html

- Additional databases for use as WebLogic Integration repositories

  For current information on database support for WebLogic Integration repositories, see the Supported Platforms page at the following URL:

  http://edocs.bea.com/platform/docs81/support/index.html

- Overloaded stored procedures for Oracle databases

  Overloading of stored procedures is now supported for both Oracle and Informix databases. For more information about stored procedures, see "Setting Service Properties" in "Defining Application Views for RDBMS" in the *WebLogic Adapter for RDBMS User Guide* at the following URL:

  http://edocs.bea.com/wladapters/rdbms/docs812/pdf/user.pdf

- Multiple row inserts using a single SQL statement

  Both single and multiple row SQL INSERT statements are supported by the Parametrized SQL service. For information about Parametrized SQL services, see "Setting Service Properties" in "Defining Application Views for RDBMS" in the *WebLogic Adapter for RDBMS User Guide* at the following URL:

  http://edocs.bea.com/wladapters/rdbms/docs812/pdf/user.pdf

Supported Platforms

The WebLogic Adapter for RDBMS currently supports the following platforms:

- Sun Solaris 8 (with Sun recommended patches)

- Sun Solaris 9 (with Sun recommended patches)

- Microsoft Windows 2000 Professional with Service Pack 2 and higher

- Microsoft Windows 2000 Server with Service Pack 2 and higher

- Microsoft Windows 2000 Advanced Server with Service Pack 2 and higher

- Hewlett-Packard HP-UX 11.0

- Hewlett-Packard HP-UX 11i

- Red Hat Enterprise Linux AS 2.1

We are working to certify this adapter on additional platforms. Up-to-date information on supported platforms is available at the following URL:

http://edocs.bea.com/wladapters/docs81/support/index.html

Software Requirements

Before you install the BEA WebLogic Adapter for RDBMS, ensure that you have the following software installed:

- BEA WebLogic Platform 8.1 Service Pack 2

  The software can be downloaded from the BEA Web site at the following URL:

  http://commerce.bea.com/downloads/products.jsp

  The information required to install WebLogic Platform 8.1 can be found at the following URL:

  http://edocs.bea.com/platform/docs81/install/index.html

  Note: The WebLogic Server and WebLogic Integration components *must* be installed.

- Java Runtime Environment (JRE) 1.4.1 or higher

- Internet Explorer 6.0 or higher

The following are the databases that the WebLogic Adapter for RDBMS supports as the target database:

- Oracle 8.1.7

- Oracle 9i Release 1

- Oracle 9i Release 2 (9.2.0.4)

- MS SQL Server 2000 SP2

- DB2 UDB 7.2

- Informix Dynamic Server Version 9.40

- Sybase Adaptive Server 12.5

Note: Be sure to use the database that is applicable to your platform and environment.

For details of the drivers with which the WebLogic Adapter for RDBMS has been tested, see Appendix A, "Supported Drivers."

Determining the Adapter Version

To allow you to easily determine the version of the BEA WebLogic Adapter for RDBMS, identifying information has been added to the `Manifest.mf` file. This file is included in the EAR file.

For example, the `Manifest.mf` file for BEA WebLogic Adapter for RDBMS 8.1.2 contains the following:

```
Manifest-Version: 1.0
Ant-Version: Apache Ant 1.5.3
Created-By: 1.4.1_05-b01 (Sun Microsystems Inc.)
Built-By: BEA Systems,Inc
Label: BEAVIENNA.0002
Implementation-Title: BEA RDBMS Adapter 2003.12.19.064803 PM
Implementation-Version: 8.1.2
Implementation-Vendor: BEA Systems
```

The Implementation-Version is provided in the following format: `W.X.Y`:

- `W.X` represents the major and minor release number (in this case, `8.1`)

- `Y` represents the service pack number (in this case, `1`)

If you obtain a patch subsequent to a release, identifying information specific to the patch is included in the `Manifest.mf` file.

Problems Fixed in This Release

The following table lists selected problems fixed in BEA WebLogic Adapter for RDBMS Release 8.1.2, including a CR (Change Request) number for each problem.

To learn more about the known limitation in BEA WebLogic Adapter for RDBMS Release 8.1.2, see "Known Limitations" on page 1-6.

Table 1. Problems Fixed in BEA WebLogic Adapter for RDBMS Release 8.1.2

Problem CR124043	It is not possible to configure event connection details with different ownership than the user for which the EVENT, EVENT_DATA and target tables were created.
Problem CR126362	Invoking a stored procedure service in a loop against an Oracle database causes the following exception: `java.sql.SQLException: ORA-01000: maximum open cursors exceeded`
Problem CR128854	Intrusive events fail on Oracle tables containing long data type.
Problem CR130318	Application view does not reestablish connection for services when database is restarted after an EIS failure.
Problem CR130526	Oracle cursors left open after stored procedure service completed.

Known Limitations

The following table describes limitations in the current release of the BEA WebLogic Adapter for RDBMS. Whenever available, a recommended workaround is provided.

Where applicable, entries include a CR (Change Request) number or Case number. Please refer to this number when contacting BEA Customer Support for assistance in tracking the problem. For contact information, see "Contacting BEA Customer Support" on page 1-15.

Table 2. Known Limitations

1	For Oracle, the Standard SQL and Arbitrary SQL service types do not support DDL statements.
Platform	All
Workaround	None

Table 2. Known Limitations (Continued)

2	**Problem CR105741**	Only stored procedures returning a single REFCURSOR can be executed through the adapter. Stored procedures returning multiple REFCURSOR data type are not supported.
	Platform	All
	Workaround	None
3	**Problem CR106128**	If you use a Normal/XA connection to execute services with two different transaction isolation levels, you get the following exception: `java.sql.SQLException: ORA-01453: SET TRANSACTION must be first statement of transaction.` This is a known problem in Oracle Thin Driver 9.2.0 (shipped with WebLogic).
	Platform	All
	Workaround	Services falling under the scope of a transaction (within the same resource manager) should have the same transaction isolation level. For more information, see the following URL: http://e-docs.bea.com/wls/docs81/jta/thirdpartytx.html

Table 2. Known Limitations (Continued)

4	Problem CR105742 CR105744 CR105745 CR105746 CR105747 CR105748	You will not be able to create Standard SQL or Parametrized SQL services for SQL statements of the following types: • Sub-query For example: `SELECT * FROM EMP WHERE EMP_ID IN (SELECT EMP_ID FROM BONUS WHERE SAL>5000)` • Derived columns in the `SELECT` clause For example: `SELECT SAL*100 FROM BONUS` • `BETWEEN` keyword in the `SELECT` clause For example: `SELECT SAL FROM BONUS WHERE SAL NOT BETWEEN 7000 AND 8000` • Functions in the `SELECT` clause For example: `SELECT AVG(SAL) FROM BONUS` • Inner join using `(+)` keyword For example: `SELECT A.Varchar1, B.Varchar1 FROM BASE A, BASE B WHERE A.Integer1(+) = B.Integer1` You will get the following exception: `java.lang.reflect.InvocationTargetException:com.metamata.parse.ParseException.` This is due to the limitations of the SQL Parser implementation used for these service types.
	Platform	All
	Workaround	Use the Arbitrary SQL service type to execute any SQL statement.
5	Problem CR120451	You will not be able to add a service for SQLJ Stored Procedures in Sybase databases. You will get the following exception: `java.lang.Exception: Parameter mismatch`
	Platform	All
	Workaround	None.

Table 2. Known Limitations (Continued)

6	Problem CR120640	A service that consists of an Informix SPL routine (procedure or function) with a single OUT parameter and multiple return values returns only the first return value.
	Platform	All
	Workaround	None.
7	Problem CR120908	WebLogic Workshop validation fails for response on services and events for columns containing null values for the following data types: • DB2 data types float, real, double, timestamp, time, date, and bigint • Sybase data types numeric, double, float, real, datetime, and smalldatetime • Oracle data types real, float, double, and date • Informix data types int8, float, smallfloat, date, datetime, and boolean • Microsoft SQL Server data types float, real, datetime, and smalldatetime Validation of event response fails for columns constituting a primary key for a Microsoft SQL Server EIS. Validation fails for response on services and events for columns of data type boolean and for Insert Trigger events on columns of data type money for an Informix EIS.
	Platform	All
	Workaround	None.
8	Problem CR122787	The response XML document generated as a result of executing a stored procedure service does not validate against the XML schema generated at design time. This happens only for stored procedures that return the result of one or more SELECT statements as either a result set or an OUT parameter.
	Platform	All
	Workaround	None.

Table 2. Known Limitations (Continued)

9	Problem CR122803	byte, text, and all binary data types cannot be used in WHERE clauses in SQL statements for any service type.
	Platform	All
	Workaround	None.
10	Problem CR123443	[i18n]When the CLIENT_LOCALE/SERVER_LOCALE/DBLOCALE is set to ja_jp.sjis, configuring a trigger event on an Informix table containing a column of datatype datetime causes the following SQL exception at runtime: `java.sql.SQLException: System or internal errorjava.sql.SQLException: Unable to build a Date object based on localized date string representation.`
	Platform	All
	Workaround	None.
11	Problem CR120449	An arbitrary service containing a SQL query that includes the <> operator throws the following exception when you test it in WebLogic Workshop: `com.bea.wlw.runtime.core.request.RequestValidationExcepti on: Unable to transform query arguments to Java arguments error: Unexpected character encountered (lex state 9): '>'`
	Platform	All
	Workaround	Use <> instead of the <> operator.
12	Problem CR120452	An arbitrary service containing DDL statements throws an exception when you test it in WebLogic Workshop against a Sybase database using an XA connector. For example, a service containing a CREATE TABLE statement throws the following exception: `java.sql.SQLException: [DataDirect][Sybase JDBC Driver][Sybase]The 'CREATE TABLE' command is not allowed within a multi-statement transaction in the 'sybaseqa' database.`
	Platform	All

Table 2. Known Limitations (Continued)

	Workaround	Use a Local or No Txn connector instead of the XA connector.
13	**Problem** **CR120650**	Selecting data from an Informix table containing a column having a complex datatype returns incorrect values.
	Platform	All
	Workaround	None.
14	**Problem** **CR121888**	Standard SQL services having DELETE statements without a WHERE clause do not work. Testing such services in WebLogic Workshop causes the following exception: `java.rmi.ServerError: A error occurred the server; nested exception is: weblogic.utils.AssertionError: ***** ASSERTION FAILED *****[ cannot unmarshaling throwable ] - with nested exception:`
	Platform	All
	Workaround	Include a WHERE clause in all DELETE statements used in Standard SQL services.
15	**Problem** **CR122810**	You cannot use NULL values as parameters in Standard SQL services UPDATE and INSERT statements. Testing such services causes exceptions to be thrown.
	Platform	All
	Workaround	Use Arbitrary or Parametrized SQL services for such queries.
16	**Problem** **CR123342**	[i18n] Intrusive events cannot be created on a table containing Japanese column names. Testing such services causes the following exception to be thrown: `Intrusive SQL Query is improper..enter a proper SQL Query.`
	Platform	All
	Workaround	Use English column names.
17	**Problem** **CR123330**	You cannot insert more than 4KB of data in an Oracle BLOB or CLOB datatype using any type of service. Testing such services causes exceptions to be thrown.

Table 2. Known Limitations (Continued)

	Platform	All
	Workaround	None.
18	**Problem CR124371**	Using a Stored Procedure service to invoke an Informix function that returns multiple SELECT statements with an OUT parameter causes a SQL exception.
	Platform	All
	Workaround	None.
19	**Problem CR121428**	After deploying an Application View that contains a trigger event for a Sybase table, you cannot edit the type of that event or the table associated with that event.
	Platform	All
	Workaround	Manually delete the trigger from the database or delete the old event and create a new one with a different name.
20	**Problem CR129346**	Intrusive events with delete option enabled are not available for DB2 EIS.
	Platform	All
	Workaround	None
21	**Problem CR123888**	[i18n] Standard and arbitrary SQL services attempting to create Informix column names with UTF-8 Japanese data fail with XA driver, and display the following error: `An illegal character has been found in the statement.`
	Platform	All
	Workaround	Use Informix nonXA or local_Transaction driver.
22	**Problem CR130193**	DB2 stored procedure services with out parameters fail with a `java.lang.NullPointerException` exception.

Table 2. Known Limitations (Continued)

	Platform	Solaris
	Workaround	None.
23	**Problem CR131829**	[i18n] When a query containing Japanese UTF-8 characters and having an invalid schema associated with the double byte table name is given as input to an Arbitrary Service for DB2, the Sun JVM terminates abnormally. In such cases where the fully qualified table name is incorrect, a `HotSpot Virtual Machine Error: EXCEPTION_GUARD_PAGE` error is thrown in the WebLogic Server console, and WebLogic Server terminates abnormally.
	Platform	Windows
	Workaround	Use JRockit JVM.
24	**Problem CR124368**	[i18n] While configuring events using the Informix XA driver, the Browse DBMS page throws the following SQL exception if the database contains a table with a Japanese DBCS name: `An illegal character has been found in the statement.`
	Platform	All
	Workaround	None
25	**Problem CR125864**	An arbitrary service with isolation level set to `serialized` for an XA connector is not a supported configuration for the Oracle 9i Thin Driver.
	Platform	All
	Workaround	Use Oracle 10g driver.
26	**Problem CR126143**	For Microsoft SQL Server databases, `UPDATE` and `DELETE` trigger events always return only one row, instead of the actual number of rows affected.
	Platform	All
	Workaround	None

Table 2. Known Limitations (Continued)

27	**Problem** **CR130193**	For DB2, the stored procedure service retrieves `null` values even when the `out` parameter contains some valid values for `numeric` and `decimal` data types. The `isnull` attribute in these cases is shown as `false`.
	Platform	All
	Workaround	None
28	**Problem** **CR132830**	Timestamp events are triggered more than once with Oracle 8.1.7 repositories.
	Platform	All
	Workaround	None
29	**Problem** **CR128862**	Trigger events (`insert`, `update`, and `delete`) on a column of data type `date` time out in Oracle 9i.
	Platform	All
	Workaround	None
30	**Problem** **CR130327**	The following configurations are not supported: • Oracle 8.1.7 EIS and WLI Repository using Oracle 10g Thin Driver • Oracle 8.1.7 EIS using Oracle 9i Thin Driver and Oracle 8.1.7 WLI Repository using Oracle 10g Thin Driver
	Platform	All
	Workaround	Use Oracle 9i Thin Driver for both Oracle 8.1.7 EIS and WLI Repository.

Contacting BEA Customer Support

If you have any questions about this release of the BEA WebLogic Adapter for RDBMS, or if you have problems installing and running the adapter, contact BEA Customer Support through BEA eSupport at `http://support.bea.com`. You can also contact Customer Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number

- Your company name and company address

- Your machine type and authorization codes

- The name and version of the adapter you are using

- The version of WebLogic Integration you are using

- A description of the problem and the content of pertinent error messages

Supported Drivers

This section lists the drivers that the BEA WebLogic Adapter for RDBMS supports on the following operating systems:

- Windows 2000 Professional

- Sun Solaris 8 and 9

- HP-UX 11i

It also lists the driver class names and JDBC URLs corresponding to the drivers.

Note: The BEA WebLogic Adapter for RDBMS should be used in conjunction with a JDBC 2.1 compliant driver.

Oracle Thin Driver

You can download the Oracle 9i 9.2.0.3 Thin Driver file (`ojdbc14.jar`) or Oracle 10g 10.0.1.0 Thin Driver from the following URL:

http://otn.oracle.com/software/tech/java/sqlj_jdbc/index.html

Table A-1 Driver Class Names and JDBC URLs for Oracle Thin Driver

For Normal Connection	Driver Class Name	`oracle.jdbc.driver.OracleDriver`
	JDBC URL	`jdbc:oracle:thin:@`*hostname*`:`*port*`:`*schema_name*
	Example	`jdbc:oracle:thin:@127.0.0.1:1521:UAT02`

Table A-1 Driver Class Names and JDBC URLs for Oracle Thin Driver (Continued)

For XA Connection		
	Driver Class Name	`oracle.jdbc.xa.client.OracleXADataSource`
	JDBC URL	`jdbc:oracle:thin:@hostname:port:schema_name`
	Example	`jdbc:oracle:thin:@127.0.0.1:1521:UAT02`

MS SQL Server 2000 JDBC Driver

You can download the MS SQL Server 2000 JDBC Driver files `msutil.jar`, `msbase.jar`, and `mssqlserver.jar` from the following URL:

http://msdn.microsoft.com/library/default.asp?url=/downloads/list/
sqlserver.asp

Table A-2 Driver Class Names and JDBC URLs for MS SQL Server 2000 JDBC Driver

For Normal Connection		
	Driver Class Name	`com.microsoft.jdbc.sqlserver.SQLServerDriver`
	JDBC URL	`jdbc:microsoft:sqlserver://hostname:port;` `SelectMethod=Cursor;DatabaseName=?`
	Example	`jdbc:microsoft:sqlserver://127.0.0.1:1433;` `SelectMethod=Cursor;DatabaseName=AdapterTesting`
For XA Connection	Driver Class Name	`com.microsoft.jdbcx.sqlserver.SQLServerDataSource`
	JDBC URL	`jdbc:microsoft:sqlserver://hostname:port;` `SelectMethod=?;DatabaseName=?;ServerName=?`

	Example	`jdbc:microsoft:sqlserver://127.0.0.1:1433;`
		`SelectMethod=cursor;DatabaseName=AdapterTesting;`
		`ServerName=itpl-025019`

DB2 JDBC Driver (JDBC 2.0 Compliant)

The DB2 JDBC Driver file, db2java.zip, is available with the database instance.

Table A-3 Driver Class Names and JDBC URLs for DB2 JDBC Driver (JDBC 2.0 Compliant)

For Normal Connection	Driver Class Name	`COM.ibm.db2.jdbc.app.DB2Driver`
	JDBC URL	`jdbc:db2:`*DatabaseName*
	Example	`jdbc:db2:DWCTRLDB`
For XA Connection	Driver Class Name	`COM.ibm.db2.jdbc.DB2XADataSource`
	JDBC URL	`jdbc:db2;DatabaseName=?`
	Example	`jdbc:db2;DatabaseName=DWCTRLDB`

Informix Dynamic Server JDBC Driver

The Informix JDBC Driver Version 2.21 files, ifxjdbc.jar and ifxjdbcx.jar, are available with the database instance.

Table A-4 Driver Class Names and JDBC URLs for Informix JDBC Driver

For Normal Connection	Driver Class Name	`com.informix.jdbc.IfxDriver`
	JDBC URL	`jdbc:informix-sqli://`*host*`:`*port*`/`*DatabaseName*`:` `INFORMIXSERVER=`*ServerName*
	Example	`jdbc:informix-sqli://127.0.0.1:1526/BEADEV:` `INFORMIXSERVER=BEA_SVR_INFX`
For XA Connection	Driver Class Name	`com.informix.jdbcx.IfxXADataSource`

	JDBC URL	`jdbc:informix-sqli://`*host*`:`*port*`/`*DatabaseName*`;`
		`ServerName=`*ServerName*`;PortNumber=`*port*`;`
		`IfxIFXHOST=`*host*`;DatabaseName=`*DatabaseName*

	Example	`jdbc:informix-sqli://127.0.0.1:1526/BEADEV;Serv`
		`erName=BEA_SVR_INFX;PortNumber=1526;`
		`IfxIFXHOST=127.0.0.1;DatabaseName=BEADEV`

DataDirect Connect for JDBC

For integration with Sybase Adaptive Server databases, use the BEA WebLogic Adapter for RDBMS with DataDirect Connect for JDBC (Release 3.3). The required JDBC Driver files, `util.jar`, `base.jar`, and `sybase.jar`, are part of DataDirect Connect for JDBC Release 3.3.

For information about obtaining DataDirect Connect for JDBC, see the following URL:

http://www.datadirect.com/products/jdbc/jdbcindex.asp

Table A-5 Driver Class Names and JDBC URLs for Informix JDBC Driver

For Normal Connection		
	Driver Class Name	`com.ddtek.jdbc.sybase.SybaseDriver`
	JDBC URL	`jdbc:datadirect:sybase://host:port;` `databaseName=name`
	Example	`jdbc:datadirect:sybase://127.0.0.1:2048;` `databaseName=RdbmsQA`
For XA Connection	Driver Class Name	`com.ddtek.jdbcx.sybase.SybaseDataSource`
	JDBC URL	`jdbc:datadirect:sybase://host:port;` `DatabaseName=name;ServerName=host;` `PortNumber=port;SelectMethod=cursor`
	Example	`jdbc:datadirect:sybase://127.0.0.1:2048;` `DatabaseName=RdbmsQA;ServerName=127.0.0.1;` `PortNumber=2048;SelectMethod=cursor`