DB2

IBM

DB2 Version 9
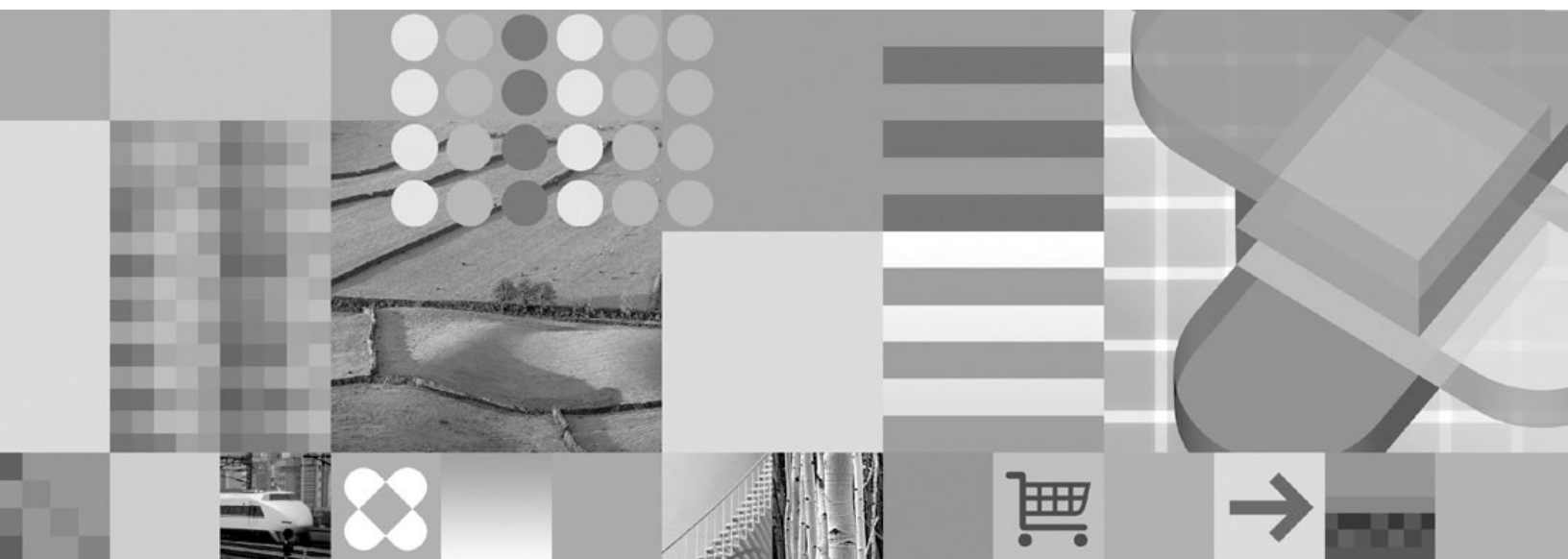for Linux, UNIX, and Windows

Release Notes

DB2®

DB2 Version 9
for Linux, UNIX, and Windows

Release Notes

Before using this information and the product it supports, be sure to read the general information under *Notices*.

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Contents

About the Release Notes

The Release Notes contain information about known problems and documentation updates for DB2® Version 9 for Linux®, UNIX®, and Windows® and for DB2 Connect™ Version 9.

The chapter on known problems includes information about:
- Temporary limitations, problems, and solutions related to installing the product or using particular product features
- Incompatibilities between the current version of the DB2 product and prior versions
- Incompatibilities between the DB2 product and other products

The chapter on documentation updates includes late-breaking additions or corrections to product documentation.

DB2 Information Center:

The primary source of DB2 product documentation is the DB2 Information Center. You can find this online at http://publib.boulder.ibm.com/infocenter/db2help/index.jsp.

Alternatively, you can install a local copy of the DB2 Information Center, which is included with the product as a separately installable image. If you install a local copy, you should download the latest update before using your local copy. Updating your Information Center will provide a complete copy of the documentation also adds capabilities that improve searches for DB2 message information. For instructions, see Updating the DB2 Information Center installed on your computer or intranet server.

DB2 Information Center topics related to installation and troubleshooting:

The list below highlights topics in the DB2 Information Center of particular interest for product installation and troubleshooting:
- The *What's New* topics describe changes introduced in this version. Particularly relevant to product installation and troubleshooting are the topics on product packaging, terminology, and changed, deprecated, and discontinued functionality. These topics are available in the DB2 Information Center section entitled *What's New*. You can access this section by expanding *Product overviews* then *Database systems*.
- The topics in the *Installing* section provide information on installation prerequisites. However, for the most up-to-date prerequisite information, see http://www.ibm.com/software/data/db2/udb/sysreqs.html .
- For the most up-to-date prerequisite information for DB2 Connect, see http://www.ibm.com/software/data/db2/db2connect/sysreqs.html .
- The topics in the *Migrating* section provide information on migrating to DB2 Version 9.

In addition, support and troubleshooting assistance is available on the DB2 Support Web site. This site includes technotes and service flashes that describe changes to the documentation and information about known limitations discovered

after the creation of the Release Notes. The DB2 Support Web site address is
http://www.ibm.com/software/data/db2/udb/support.html.

Convention for displaying directory paths in Release Notes:

Windows systems use backslashes (\) to delimit directories in a directory path.
Linux and UNIX systems use forward slashes (/) as delimiters. The Release Notes
use these conventions when the information is platform specific. However, when
the information is platform independent, the Release Notes use the Windows
convention, so if you are running on a Linux or UNIX system, you must enter
directory paths differently than shown.

Part 1. Known problems

This section includes information about:

- Temporary limitations, problems, and solutions related to installing the product or using particular product features.
- Incompatibilities between the current version of DB2 and prior versions.
- Incompatibilities between DB2 and other products.

In some cases, the information states that a particular aspect of a feature is not supported or that a performing a particular action with a feature might result in problems. In these cases, attempts to use the feature might fail, or the results might be useless or harmful.

Chapter 1. Product-wide

db2sampl - Create sample database command

Problem:

The **db2sampl** command might fail with a SQL0443 error if:

- The **-dbpath** option is specified with a path name greater than 32 characters.
- The **-schema** option was not specified and the CURRENT SCHEMA value has a space.
- The **-schema** option was not specified and the current user's authorization ID contains a space (Windows only).
- The **-schema** option is specified from environments configured for one of the following locales: Russian, German, Finnish, French, or Czech.

Solution:

Try one of the following:

- Issuing the **db2sampl** command with a shorter path value (if the *-dbpath* option was specified).
- Issuing the **db2sampl** command with no options.
- Setting the locale to En_US and issue the **db2sampl** command.

Chapter 2. Installation

All platforms

Coexistence with beta versions of a DB2 product

Problem:

Beta and non-beta versions of DB2 Version 9 cannot coexist on a system. This problem applies to both client and server components of the product.

Solution:

Uninstall the beta version of DB2 Version 9 before installing the non-beta version.

DB2 Information Center installation

Problem:

When you install the DB2 Information Center, you can choose a service name and port number rather than accepting the default values. If you choose a service name that already exists in the services file on the system and only change the port number, you might receive an error that states *The service name specified is in use*.

Solution:

Solution 1: Use the default values.

Solution 2: Use a service name and port number that are both already in the services file.

Solution 3: Add a service name and port number to the service file using values that are not already used.

Installation directory paths that have National Language characters

Problem:

You cannot install a DB2 product in a path whose name contains National Language characters.

Solution:

Install your DB2 product in a path whose name does not contain National Language characters.

Additional Details:

National Language characters are characters not found in the English (en_US) character set.

Windows platforms

DB2 Setup Launchpad (Windows)

Problem:

The DB2 Setup Launchpad does not display if you do not set the
TEMP directory system variable.

Solution:

Solution 1: Set the TEMP directory system variable for the current session by
entering the following command from a command prompt:

```
set TEMP=directory name
```

For example, `set TEMP=c:\temp` .

Solution 2: Set the TEMP directory system variable as system-wide variable. To do
this:
1. On the Windows Start menu, click **Control Panel.**
2. Double-click **System.**
3. Click the **Advanced** tab.
4. Click **Environment Variables.**
5. Click **New.**
6. Specify the name *TEMP* and its value.

Coexistence with DB2 UDB Version 8 (Windows)

Problem:

Installing a DB2 Universal Database (UDB) Version 8 product is not supported if a
DB2 Version 9 product is already installed on the system. This problem applies to
both client and server installations.

Solution:

To install a copy of DB2 UDB Version 8 when DB2 Version 9 is already installed:
1. Uninstall the DB2 Version 9 product.
2. Install the DB2 UDB Version 8 product.
3. Reinstall the DB2 Version 9 product.

Other details:

The DB2 UDB Version 8 DB2 Setup Launchpad does not prevent you from
installing Version 8 when Version 9 is already installed. However, doing so will
cause problems.

Elevated privileges (Windows 2000)

Problem:

You cannot use regular (non-Administrator) user accounts to run the **db2start** and **db2stop** commands on Windows 2000.

Solution:

Solution 1: Use a Windows Power User account or a Windows Administrator account.

Solution 2: Install a newer version of the Windows operating system.

DB2 client installation by a non-Administrator user (Windows Server 2003)

Problem:

On a Windows Server 2003 computer, you cannot install a DB2 client if you do not have Administrator authority.

Solution:

A System Group Policy needs to be changed by an Administrator user before a non-Administrator user can install a client. To do this, an Administrator user needs to enable the 'Disable Windows Installer' policy. To access this setting, enter **gpedit.msc** to launch the Group Policy Object Editor then select *Computer Configuration*, then *Administrative Templates*, then *Windows Components*, then *Windows Installer*. Set this value to *Never*.

Installation log error related to SRSetRestorePoint API (Windows 2003)

Problem:

You might see an error message in the installation log that refers to the SRSetRestorePoint API. The message text reads in part: *...Calling SRSetRestorePoint API...The call to SRSetRestorePoint API failed*.

Solution:

Ignore this error message, which is caused by a Windows Installer error.

Linux and UNIX platforms

Asian fonts (Linux)

Problem:

Asian characters might not display properly.

Solution:

Obtain and install the required fonts. For details, see the DB2 documentation topic entitled *Availability of Asian fonts (Linux)*.

Installation path length (AIX and HP-UX)

Problem:

The maximum length for the installation path name is approximately 100 bytes on AIX® and HP-UX PA-RISC platforms.

Solution:

None

Other details:

For details on the problem, see the Technote # 1239797 entitled Maximum length of DB2 9 installation path on UNIX and Linux platforms .

Other installation topics

DB2 Embedded Application Server (EAS) uninstallation

Problem:

The command to uninstall the DB2 Embedded Application Server (EAS) component of the DB2 product does not uninstall the component completely. The registry entry and file system directory remain.

Solution:

A solution is provided for each platform.

Solution (Windows):
1. Log in as a user with Windows administrative privileges.
2. Run regedit to remove the DB2EAS key located at HKEY_LOCAL_MACHINE —> SOFTWARE —> IBM —> DB2EAS.
3. Remove the Windows system directory where the DB2 Embedded Application Server was installed.

Solution (Linux and UNIX):
1. Log in as the root user.
2. Change to the db2_install_path/bin directory.
3. Run ./**db2greg -dump**

   This command displays the content of the registries. The entry for EAS is shown below:

   ```
   S,DB2EAS,6.1.0.0,AppServer_install_path,,,,,,,
   ```

   where *AppServer_install_path* is the actual path where EAS is installed.
4. Run db2greg -delservrec service=DB2EAS,version=6.1.0.0,installpath=AppServer_install_path

   where *AppServer_install_path* is the path where EAS is installed
5. Remove the file system directory where EAS is installed

db2_install and response file installation with Japanese and Traditional Chinese code sets

Problem:

During a non-GUI DB2 product installation, it is possible to see corrupted text if you use particular combinations of locales and code sets. The following combinations are known to display corrupted text:

- Japanese (932 code set) on Windows
- ja_JP.utf8 on Linux
- ja_JP.IBM-eucJP on AIX
- zh_TW.utf8 on Linux

One message known to display corrupted text is the message that states that an SMTP server wasn't specified.

Solution:

None

Additional details:

The types of installation affected are db2_install and db2setup -r
<response file> on Linux and UNIX and
setup /u <response file> on Windows.

The uncorrupted version of the SMTP server message reads as follows: *Notification SMTP server has not been specified. Notifications cannot be sent to contacts in your contact list until this is specified. For more information see the DB2 administration documentation.*

Chapter 3. Application development

CLI

CLI Decimal Float data type

Problem:

Use of the Decimal Float data type in CLI applications is subject to the following temporary restrictions:

- CLI client applications do not support the use of decimal64 and decimal128 out parameters in a stored procedure.
- Invalid characters are inserted after the end of expected output if you bind CHAR FOR BIT DATA column values to C WCHAR host variables.
- Inconsistent error messages are issued when parameter values exceed the allowed precision.

Solution:

None

.NET

DB2 .NET Data Provider DB2DecimalFloat class

Problem:

Use of the DB2DecimalFloat class in DB2 .NET Data Provider is subject to the following temporary restrictions:

- A DECFLOAT column in a DB2ResultSet object can be updated only with a value of type DB2DecimalFloat.
- .NET client applications do not support the use of a DB2DecimalFloat out parameter in a stored procedure.
- The SetDB2DecimalFloat method in the DB2ResultSet and DB2UpdateableRecord classes throws an invalid cast exception. You cannot bind DB2DecimalFloat parameter values using this method. DB2Command parameter bindings are not affected.
- An ArrayIndexOutOfBoundsException can occur when you bind a DB2DecimalFloat, Double, or Decimal parameter value with a precision greater than 16 through a DB2UpdateableRecord to a DECFLOAT(16) column.

Solution:

None

Java

DatabaseMetaData.getDriverName result

Problem:

In DB2 Version 9, the name of the DB2 Universal JDBC Driver changed to the IBM® DB2 Driver for JDBC and SQLJ. However, the JDBC DatabaseMetaData.getDriverName method returns the string ″IBM DB2 JDBC Universal Driver Architecture″ for the driver name.

Solution:

None

Chapter 4. Administration

SQL DDL

Database partition group DDL

Problem:

Issuing an ALTER DATABASE PARTITION GROUP statement to add a range of database partitions that includes database partition *n* and then issuing another ALTER DATABASE PARTITION GROUP statement to add a different range of database partitions can cause problems. These problems occur when the second statement includes a LIKE DBPARTITIONNUM *n* clause. For example:

```
ALTER DATABASE PARTITION GROUP <db-partition-name>
  ADD DBPARTITIONNUMS (
    <db-partition-number1> TO <db-partition-number2>
-- a range that includes database partition number <n>
  ) WITHOUT TABLESPACES

ALTER DATABASE PARTITION GROUP <db-partition-name>
  ADD DBPARTITIONNUMS (
    <db-partition-number1> TO <db-partition-number2>
-- a range that is different from the range specified in the previous statement
  ) LIKE DBPARTITIONNUM <n>
```

If you execute this sequence of statements, your instance is suspended and the database is marked bad.

Solution:

None.

CREATE DATABASE ON path command (Windows)

Problem:

To use the **CREATE DATABASE ON path** command on Windows, you need to first perform some setup.

Solution:

Enable the feature by setting a new registry variable, *DB2_CREATE_DB_ON_PATH*, to "ON."

Other details:

Error messages might be received when the following conditions are met:

- If DB2_CREATE_DB_ON_PATH is not set, or is set to "NO," and you specify a path as the database path when creating or restoring a database, the error message SQL1052N is returned.

- If DB2_CREATE_DB_ON_PATH is not set, or is set to "NO," and you update the DFTDBPATH database manager configuration parameter, the error message SQL5136N is returned.

The registry variable DB2_CREATE_DB_ON_PATH is also part of the SAP aggregate registry variable DB2_WORKLOAD. The DB2_CREATE_DB_ON_PATH registry variable is "ON" by default for SAP.

If you use path support when creating new databases, applications written before Version 9 that use the db2DbDirGetNextEntry () API (or an older version of the API) might not work correctly. Refer to Technote # 1238742 for details

The following database macros and structures are deprecated beginning in DB2 Version 9, that is they might be removed in a future release. (Replacements appear in brackets following each deprecated item if there is a replacement available.) The replacements are common to both Windows and UNIX platforms:
- SQL_DRIVE_SZ (SQL_DB_PATH_SZ)
- sqledinfo (db2DbDirInfoV9)
- db2DbDirInfo (db2DbDirInfoV9)
- db2DbDirNextEntryStruct (db2DbDirNextEntryStructV9)

National language support

Indic characters in GUI tools

Problem:

Indic characters might not display properly in GUI tools.

Solution:

Obtain and install the required fonts. For details, see the DB2 documentation topic entitled *Displaying Indic characters in the DB2 GUI tools.*

Other administration topics

Control Center View Storage function

Problem:

The View Storage function of the Control Center does not support the new XML storage object. This problem occurs in XML-enabled databases only.

Solution:

None

Chapter 5. Add-on products and features

Query Patroller

Query Patroller scheduling feature

Problem:

The Query Patroller scheduling feature cannot save schedules to a file in this version.

Solution:

None

Other details:

The problem is due to an incompatibility with the IBM Software Developer's Kit for Java™ level used in this version of the DB2 product.

Chapter 6. DB2 Connect

Trusted connection support for CLI

Problem:

The new capability to create trusted connections using the IBM DB2 Driver for JDBC and SQLJ does not support CLI, including XA connections.

Solution:

None

Part 2. Documentation updates

Chapter 7. Product-wide

Discontinued functionality

The *What's New* information includes a section on functionality that is discontinued in this release. Some descriptions of functionality that is discontinued still appear in other parts of the product documentation; ignore these references.

Error message updates

Any important, late changes to the product error messages are available in DB2 Service Technote #1238566.

Chapter 8. Installation

Migration

DB2 Connect migration consideration

The product documentation on migration considerations for DB2 Connect should include the following details:

If you migrate from a release prior to DB2 Connect Version 8.2.2 (equivalent to Version 8.1 FixPak 9), the authentication type specified in the database directory entry at the gateway overrides the authentication type cataloged at a DB2 client. If you did not specify an authentication type for the client, the default authentication type is SERVER. Ensure that the authentication type at the gateway is compatible with the client and the server. For more information, see Security types supported with DB2 Connect.

Chapter 9. Application development

CLI

IBM DB2 Driver for ODBC and CLI installation

The documentation on installing the IBM DB2 Driver for ODBC and CLI should include the following details:

The zip or tar.Z file that contains the driver is located in the installation CD directory `(CD Top)/db2/(platform)/clidriver`.

Java

DB2Xml interface

The documentation on the DB2Xml interface contains some incorrect information. The following DB2Xml interface methods have been renamed:

- The close () method is renamed to closeDB2Xml ().
- The isClosed () method is renamed to isDB2XmlClosed ().

JDBC connection pooling

The documentation related to JDBC connection pooling contains some information about functionality that is discontinued in this release:

- The connectionReuseProtocol property has been removed.
- The following DB2Connection methods have been removed:

```
recycleDB2Connection:
public void recycleDB2Connection()
reuseDB2Connection (untrusted reuse without reauthentication):
 public DB2Connection reuseDB2Connection()
 public DB2Connection reuseDB2Connection(
  int  connectionReuseProtocol,
   java.util.Properties properties)
 public DB2Connection reuseDB2Connection(
  int connectionReuseProtocol)
```

- The following DB2PooledConnection methods have been removed:

```
getDB2Connection (untrusted reuse without reauthentication):
  public DB2Connection reuseDB2Connection(
  int  connectionReuseProtocol,
  java.util.Properties properties)
recycleDB2Connection:
public void recycleDB2Connection()
```

useTargetColumnEncoding property

Documentation related to the useTargetColumnEncoding property for DataSource is obsolete. This property has been removed from the IBM DB2 Driver for JDBC and SQLJ.

CURRENT TIMESTAMP special register

The *What's New* documentation regarding changes in existing functionality should include the following text:

In DB2 Version 9, the value returned from the CURRENT TIMESTAMP special register might not be unique, even for requests from the same application on a single database partition. There has never been a documented guarantee that requests return unique CURRENT TIMESTAMP values and changes in DB2 Version 9 increase the possibility that two requests might return the same value. This change in behavior will not impact an application unless the application uses the CURRENT TIMESTAMP special register value with an expectation that two requests would never return the same value.

Possible approaches for applications requiring unique values include:
* Using the GENERATE_UNIQUE function.
* Requesting the next value for a sequence created in the database.
* Generating an identity value using an identity column.

Chapter 10. Administration

Administrative SQL routines and views

ADMINTABINFO administrative view and ADMIN_GET_TAB_INFO table function

The documentation contains information that is incorrect. The text should state:

If the tabschema is empty (") or you specify NULL and tabname, an error is returned. To retrieve information for a specific table, you must identify the table by both schema and table name.

Data recovery and high availability

High availability in a clustered environment

The product documentation topic *High Availability* should include the following details:

In a clustered environment, you should not specify the DB2 server's transferable IP address, or any hostname that resolves to this address, in the db2nodes.cfg file. Use of these addresses or names in the db2nodes.cfg file can prevent DB2 database partitions from successfully relocating after a computer failure.

Performance

logfilsiz - Size of log files configuration parameter

The current documentation is incorrect. The text describing this parameter should read:

The upper limit of the log file size, combined with the upper limit of the number of log files (logprimary + logsecond), gives an upper limit of 512 GB of active log space. As well, the range of valid values for the logfilsiz parameter is [4 - 524286].

Increased memory requirements

Because DB2 Version 9 contains significantly more functionality than previous DB2 releases did, DB2 Version 9 memory requirements are greater than those of previous releases. In particular, the basic memory requirement has typically increased by between 0.5 and 1.5 MB per connection, depending on the operating system. This basic memory requirement is for the memory that the operating system allocates for each connection and is independent of the dynamically allocated memory, such as the application heap and sort heap, that each connection uses. If you migrate to DB2 Version 9, you might need to adjust your memory allocation parameters to accommodate the somewhat larger per-connection footprint of DB2 Version 9.

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