

IBM DB2 Information Integrator



# Release Notes for Classic Federation for z/OS

*Version 8.2*



IBM DB2 Information Integrator



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*Version 8.2*

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## About the release notes

The release notes contain the latest information about IBM® DB2® Information Integrator Classic Federation, Version 8.2.

The release notes are in three parts:

- The first part details the diagnostic information that you can give to support if you encounter a problem with Classic Federation.
- The second part describes the product enhancements included in this Version 8.2 PTF.
- The third part describes the product fixes included in this Version 8.2 PTF.

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## DB2 Information Integrator support on the web

For more information about DB2 Information Integrator and the latest support issues, see the DB2 Information Integrator support Web page at [www.ibm.com/software/data/integration/db2ii/support.html](http://www.ibm.com/software/data/integration/db2ii/support.html).





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## Troubleshooting

When you encounter a problem and contact support, be prepared to provide some or all of the following diagnostic information:

### All applicable configuration files captured within the server log

For example:

- The data server
- The correlation server
- The query processor
- The user override

You can use the MTO DISPLAY, CONFIG command to display the contents of an active configuration member in the data server's log. See *IBM DB2 Information Integrator Administration Guide and Reference for Classic Federation and Classic Event Publishing* for information on using this command.

You can also send the configuration files in the SCACCONF data set that is referenced in the data server JCL.

### Other information that you might need to provide

- The entire data server output
- All applicable DBDs, copybooks, queries, and USE grammar
- A trace file.

For additional diagnostics, you might need to provide the following information:

- If you are using Adabas data sources: the ADAREP and DDL
- If you are using CA-IDMS data sources: the schema and subschema reports
- If you are using IMS™ data sources: the IMS transaction logs
- If you are using VSAM data sources: the CICS® logs

For information about tracing, see the section about server logging in the *DB2 Information Integrator Administration Guide and Reference for Classic Federation and Event Publishing*.

- A system dump.

In the event of an abend, the full system dump is not automatically generated. If the abend is reproducible, you can add the appropriate SYSMDUMP DD to generate the dump. If a SYSMDUMP is requested, the dump is routed to the data set that is defined in the SYSMDUMP DD.

If an abend occurs and the data server's JCL does not contain a SYSMDUMP DD statement, check the data server's JES message log and the system message log to determine whether a system dump was created.

- Formatted messages from queues. The ep\_extras.zip file contains a program and queue definitions that will read the message queues.

### Abend problems on z/OS®

Include the PSW and REGS at the time of the error and the SAS/C function call trace stack. You can find the PSW and REGS in the data server output, under JESMSG LG and JESYSMSG. You can find the SAS/C

function call trace stack in the data server output in SYSTERM or in the system generated DDs, for example: SYSnnnnn.

If the problem is an abend, traceback information from the call stack is sent to Standard Output at the time of error. Traceback information is sent to the job log, if you are running in batch mode.

**Problems with the metadata utility**

Provide the SYSOUT from the problem run.

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## Product updates

The following sections describe the product enhancements included in the Version 8.2 PTFs.

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### Multiple PCB names and numbers for IMS PCB selection

You can perform IMS PCB selection using an explicitly named PCB or using ordinal PCB numbers. The PCBPREFIX clause of the USE TABLE and USE INDEX statements is extended. You can specify a set of candidate PCB names and sets and ranges of PCB numbers that are eligible to use for accessing the IMS database.

- Specifying PCB names is useful when you use the AIB interface to select the PCB used to access the IMS database but the PCB names do not match the naming conventions required for selection using the PCBPREFIX option.

For example, the PCBNAME clause is useful when using the IMS IVP PSB DFSSAM03 to access the DI21PART database. This sample PSB has a single PCB named DBPCB01. In this case, you cannot use PCBPREFIX because it assumes that the first PCB eligible for selection is named DBPCB0. The PCBNAME clause allows you to now use this PSB without modification.

- Specifying PCB numbers is useful when you want to eliminate any IMS call before the database is accessed to process the SQL statement. Using the PCBNUM approach is efficient. The PCBNUM approach also requires more knowledge about the PSB being used to access the IMS database and can be more easily impacted by changes to the contents of a PSB.

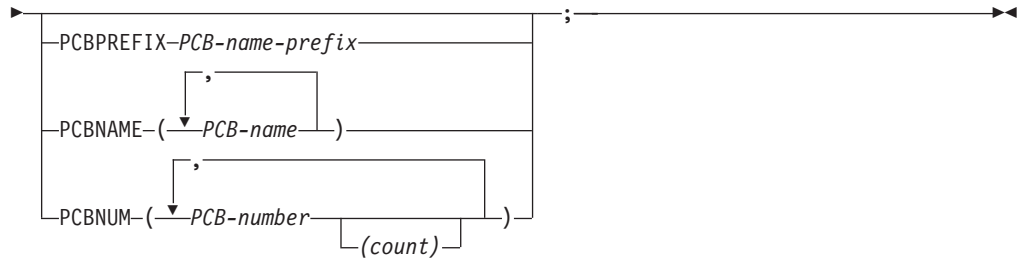
When using PCBNUM, you specify the actual number of the PCB that you want to use to access the IMS database. You can also specify ranges of PCBs that are eligible for use and specify multiple ranges of PCB numbers for use when the same PSB is used in SQL queries that contain references to multiple tables that use the same PSB to access the IMS database. The first PCB in the PSB is numbered one.

For example, using the PSB DFSSAM03 and specifying PCBNUM(1) causes the DBPCB01 to be selected to access the DI21PART database.

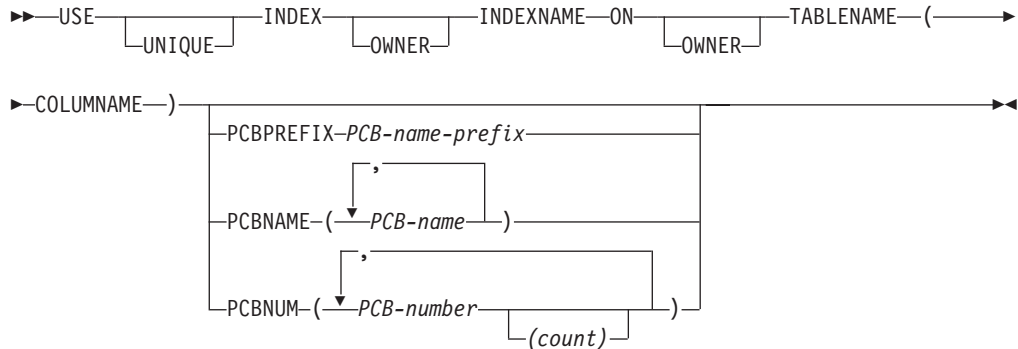
USE TABLE and USE INDEX statement syntax:

#### USE TABLE statement

```
►►—USE TABLE—table-name—DBTYPE—DBD name—INDEXROOT—index-root-segment-name—►  
►—leaf-segment-name—  
└─SCHEDULEPSB(standard-PSB-name)—  
└─SCHEDULEPSB(standard-PSB, join-PSB-name)—
```



### USE INDEX statement



### PCBNAME

The PCBNAME clause allows you to specify up to five PCB names to use for accessing a table in an IMS database. You must specify multiple names when:

- The same table is referenced more than once in an SQL statement.
- The same PCB name is associated with more than one table, and these additional tables are referenced in a single SQL statement.

Each PCB name in the list can contain up to eight characters. If you specify multiple PCB names, separate each name with a comma.

### PCBNUM

The PCBNUM clause allows you to specify up to ten sets of PCB number ranges. The order of PCB numbers represents the order in which a PCB is checked to determine if the PCB can be used to access a table in the IMS database. You must specify multiple numbers when:

- The same table is referenced more than once in an SQL statement.
- The same PCB name is associated with more than one table, and these additional tables are referenced in a single SQL statement.

You can specify PCB numbers separated by commas, or specify a range of PCB numbers that consists of a starting PCB number followed by a number enclosed in parenthesis that identifies the number of PCBs to be checked from the starting number.

## DataStage Enterprise Server: Configuration

The following configuration information explains setup steps for using DB2 Information Integrator Classic Federation with DataStage Enterprise Server.

- DataStage Enterprise Server runtime environment on HP-UX

For the sequence of the shared library path, you need to change the parameter SHLIB\_PATH using the DataStage administrator client.

1. Click **Project** and select the project that you want to change.

2. Click **Properties**.

3. Click **Environment**.

4. Click the **General** category.

5. Change SHLIB\_PATH as follows:

```
<the install path of DB2 Information Integrator Classic Federation>/cli/lib:/  
<the install path of Data Stage>/PXEngine/lib:
```

- DataStage Enterprise Server runtime environment on Sun Solaris

For the sequence of the shared library path, you need to change the parameter LD\_LIBRARY\_PATH using the DataStage administrator client.

1. Click **Project** and select the project that you want to change.

2. Click **Properties**.

3. Click **Environment**.

4. Click the **General** category.

5. Change LD\_LIBRARY\_PATH as follows:

```
<the install path of DB2 Information Integrator Classic Federation>/cli/lib:/  
<the install path of Data Stage>/PXEngine/lib:
```

- Configuration parameter settings for Enterprise ODBC stage:

When you insert, update, or delete rows using the Enterprise ODBC stage, use the following configuration parameter settings:

– STATEMENT RETENTION: DISCONNECT

– Parameter Array Size: 1

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## WebSphere Application Server (WAS): Data source definition

To connect to the data server from WAS, you can define data sources with the user-defined JDBC provider on WAS. The following procedure is an example of how to define data sources with the Administrative Console of WAS Version 6. Log in to the Administrative Console and follow these steps.

1. Click **JDBC Providers** under Resources.

2. Click **New**. Select User-defined in the Select the database type drop-down list and click **New**.

3. Enter the Name, Class path and Implementation class name input fields. For example:

- Name: IICF JDBC provider
- Class path: /opt/IBM/DB2IIClassic82/jdbc/cacjdbc21.jar
- Implementation class name: com.ibm.cac.jdbc.ConnectionPoolDataSource  
You might need to upload cacjdbc21.jar to your server.

Click **OK**.

4. Click **Data sources** under Additional Properties.

5. Click **New**. Enter Name, JNDI name, and other input fields for your application. Click **OK**.

6. Select the defined name from a list of data sources.

7. Click **Custom properties** under Additional Properties.

8. Click **New**. Enter databaseName in the Name input field and enter your database name in the Value input field. Select java.lang.String in the Type drop-down list. Click **OK**.

9. Click **New**. Enter serverName in the Name input field and enter your server host name in the Value input field. Select java.lang.String in the Type drop-down list. Click **OK**.
10. Click **New**. Enter port in the Name input field and enter your server port number in the Value input field. Select java.lang.String in the Type drop-down list. Click **OK**.
11. If you need to change a default server code page, click **New** and follow these steps:
  - a. Enter codepage in the Name input field and enter your server code page in the Value input field. Select java.lang.String in the Type drop-down list. Click **OK**.
  - b. Click **Save** in Messages.

If you do not need to change a default server code page, click **Save** in Messages.

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## Red Hat Enterprise Linux support

Classic Federation now supports Red Hat Enterprise Linux AS 4 for x86.

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## Product fixes

The following sections describe the product fixes included in the Version 8.2 PTFs.

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### Adabas

Adabas queries with an OR clause in the predicate returned unexpected results.

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### ODBC driver

- Queries run from the Microsoft SQL Server Data Transformation Services (DTS) returned incorrect, truncated data.
- For bidirectional strings that contain numbers, you need to prepare the string with bidirectional control characters (LRM, RLM) when this string will be sent from the client as part of an update statement and the server text presentation is VISUAL. If a client code page does not have bidirectional control characters, transformation might result into incorrect output.

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### Data server

When static storage was released before the data server finished processing a request, abend 0C4 occurred. Changing the storage from static storage to allocated storage corrected the problem.

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### Query processing

- Pending work for deleted statements could cause a S0C4 abend when the work was later resumed. This fix removes pending work for deleted statements.
- The INTERLEAVE INTERVAL parameter was not enforced for some queries.
- The SQLDescribeParam API was processed incorrectly if it contained multiple parameter markers.





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