IBM DB2 Information Integrator

Release Notes for Classic Event Publisher

Version 8.2

IBM DB2 Information Integrator

Release Notes for Classic Event Publisher

Version 8.2

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 9.

You can order IBM publications online or through your local IBM representative:

- To order publications online, go to the IBM Publications Center at www.ibm.com/shop/publications/order
- To find your local IBM representative, go to the IBM Directory of Worldwide Contacts at www.ibm.com/planetwide

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

Contents

About the release notes

The release notes contain the latest information about IBM® DB2® Information Integrator Classic Event Publisher, 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 Event Publisher.
- The second part describes the known problems and workarounds.
- The third part describes the product enhancements included in this Version 8.2 PTF.
- The fourth part describes the product fixes included in this Version 8.2 PTF.

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.

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 JESMSGLG 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.

Known problems and workarounds

The following sections describe the currently known limitations, problems, and workarounds for DB2 Information Integrator Classic Event Publisher.

References to forward recovery logs in the auto-journal service information entry

If a CICS VSAM data set is defined with both auto-journal logging and forward recovery logging, and if the service information entry for the auto-journal agent is set up to process both the auto-journal log stream and the forward recovery log stream for that CICS VSAM data set, the auto-journal agent might publish each data modification twice. As a workaround, the service information entry for the auto-journal agent should reference only the auto-journal log stream.

Use of auto-journal agent as recovery agent for the file control agent

The auto-journal agent can act as a recovery agent to the file control agent. In this situation, the service information entry for the auto-journal is specified as shown in the following example:

```
SERVICE INFO ENTRY = CACECA1J CICSQ 2 1 1 1 1 5M 5S \
  SERVER=KHF \
  INTERVAL=8 \
  RECOVERY \
  CICSQ.CICSQ.DFHLOG \
  CICSQ.CICSQ.DFHJ01 \
  CICSQ.CICSVR.DFHLGLOG
```

However, the starting position in the auto-journal logs is not always set so the auto-journal agent might select an incorrect starting point in the auto-journal logs. As a workaround, you can specify the service information entry as shown in the following example:

```
SERVICE INFO ENTRY = CACECA1J CICSQ 2 1 1 1 1 5M 5S \
  SERVER=KHF \
  INTERVAL=8 \
  RECOVERY \
  COLDSTART TIME mmddyyyy hhmmss \
  CICSQ.CICSQ.DFHLOG \
  CICSQ.CICSQ.DFHJ01 \
  CICSQ.CICSVR.DFHLGLOG
```

where mmddyyyy hhmmss identifies the position in the auto-journal logs at which reading should begin.

Product updates

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

Change-capture agents for CICS VSAM data sources

There are now three different types of change-capture agents for capturing changes when you are publishing events from CICS VSAM data sources. In addition to the log-reading change-capture agent, you can use the new file control agent and auto-journal agent.

You can choose the type of change-capture agent that best suits your operating environment. The following sections describe each change-capture agent:

File control agent

The file control agent consists of a CICS global user exit (GLUE) and a CICS task-related user exit (TRUE), which together capture deletes, inserts, and updates to VSAM data sets. After you define the exits in CICS, you can run CICS transactions to enable or disable the file control agent.

When you need to recover change data, you can use the auto-journal agent or your own method of recovery. If you want to use the auto-journal agent, you must set up auto-journal logging in your VSAM file definitions before you begin capturing changes. The auto-journal agent is configured with a service information entry in the configuration file for the data server and runs in the same address space as the correlation service. The auto-journal agent can process multiple auto-journal log streams in parallel. After consuming all data from all log streams, the auto-journal agent marks the file control agent as active.

This method of recovering change data does not require VSAM files to be recoverable.

Auto-journal agent

The auto-journal agent captures changes by processing one or more auto-journal log streams in parallel. You must configure auto-journaling in the VSAM files that you want to capture changes to. Starting at a previously recorded restart point or at a point that you specify, the auto-journal agent continuously reads the auto-journal logs, forwarding changes to the correlation service.

The auto-journal agent logically demarcates transactions in order to generate the appropriate COMMIT messages for the correlation service. The auto-journal agent assumes that transactions complete within a certain time interval. The default for this interval is 10 seconds, although you can change the interval to meet your own requirements.

The auto-journal agent can process multiple auto-journal log streams in parallel. After consuming all data from all log streams, the agent continues to check for additional data.

The auto-journal agent is configured with a service information entry in the configuration file for the data server.

Log-reading change-capture agent

The log-reading change-capture agent reads commit and rollback synchpoint notifications from the system log. The agent requires the CICS system log for obtaining the demarcations for units of recovery. You must retain system logs for at least one day. Otherwise, the system logger could physically delete log data before the log-reading change-capture agent reads that log data.

This agent also requires at least one forward recovery log.

The log-reading change-capture agent is configured with a service information entry. The change-capture agent runs in the same address space as the correlation service does.

The log-reading change-capture agent also performs the recovery of data. The recovery process is automatic and the agent returns to active mode after recovering data.

This agent requires the RECOVERY option in VSAM file definitions so that after images are written to the selected forward recovery log.

REPORT command

The CMD,xxx/xxx/xxx,REPORT command is enhanced to display only active agents, only recovery agents, or both.

- REPORT=ACTIVE displays active agents only.
- REPORT=RECOVERY displays recovery agents only.
- REPORT=BOTH displays both active agents and recovery agents.

Ensure that the options are specified correctly. Otherwise, the status of all agents (active, recovery, error, and in-doubt) will be reported.

WebSphere MQ for z/OS support

Classic Event Publisher now supports WebSphere MQ for z/OS Version 6

Product fixes

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

CA-IDMS

- Aborted run units were not removed from the unit of recovery (UOR) tracking list. As a result, the recovery restart point could move further back in the CA-IDMS journals than necessary.
- Change capture for CA-IDMS tables resulted in correlation service abend S0C4.

Correlation service

- For service information entry field 10, if the queue for communication between the correlation service and both the recovery agents and the publication service is set to XM, the correlation server failed during startup.
- When a change capture agent was indoubt, the recovery point could be incorrect.

Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in all countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country/region or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106-0032, Japan

The following paragraph does not apply to the United Kingdom or any other country/region where such provisions are inconsistent with local law:
INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product, and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information that has been exchanged, should contact:

IBM Corporation
J46A/G4
555 Bailey Avenue
San Jose, CA 95141-1003
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems, and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements, or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious, and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs, in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. You may copy, modify, and distribute these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to IBM's application programming interfaces.

Each copy or any portion of these sample programs or any derivative work must include a copyright notice as follows:

© (*your company name*) (*year*). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. _*enter the year or years*_. All rights reserved.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM
AIX
CICS
COBOL/370
DB2
DB2 Universal Database
IMS
Language Environment
MVS
MVS/ESA
SAA
VTAM
WebSphere
z/OS

The following terms are trademarks or registered trademarks of other companies:

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel, Intel Inside (logos), MMX and Pentium are trademarks of Intel Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product or service names may be trademarks or service marks of others.

Contacting IBM

To contact IBM customer service in the United States or Canada, call 1-800-IBM-SERV (1-800-426-7378).

To learn about available service options, call one of the following numbers:

- In the United States: 1-888-426-4343
- In Canada: 1-800-465-9600

To locate an IBM office in your country or region, see the IBM Directory of Worldwide Contacts on the Web at www.ibm.com/planetwide.

Product information

Information about DB2 Information Integrator is available by telephone or on the Web.

If you live in the United States, you can call one of the following numbers:

- To order products or to obtain general information: 1-800-IBM-CALL (1-800-426-2255)
- To order publications: 1-800-879-2755

On the Web, go to www.ibm.com/software/data/integration/db2ii/support.html. This site contains the latest information about:

- The technical library
- Ordering books
- Client downloads
- Newsgroups
- Fix packs
- News
- Links to Web resources

Comments on the documentation

Your feedback helps IBM to provide quality information. Please send any comments that you have about this book or other DB2 Information Integrator documentation. You can use any of the following methods to provide comments:

- Send your comments using the online readers' comment form at www.ibm.com/software/data/rcf.
- Send your comments by e-mail to comments@us.ibm.com. Include the name of the product, the version number of the product, and the name and part number of the book (if applicable). If you are commenting on specific text, please include the location of the text (for example, a title, a table number, or a page number).

Printed in USA