

# Informatica® PowerExchange® 10.5.2 Release Notes April 2022

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Read the *Informatica® PowerExchange® Release Notes* to get important information about enhancements, fixed issues, and known issues in PowerExchange 10.5.2. The release notes also include upgrade considerations, if applicable.

To access the PowerExchange 10.5.2 documentation set, browse the Informatica Documentation Portal at https://docs.informatica.com.

## **Apache Log4j RCE Vulnerability**

PowerExchange 10.5.2 has adopted Log4j library version 2.17.1.

#### **Enhancements**

The following table describes closed enhancement requests:

Enhancement	Description
PWX-10290	In the IMSID statement in the DBMOVER configuration member, you can now enter a DD: ddname instead of the name of the DBD library. This DD will point to a //DD statement in the JCL that includes one or more DBDLIBs to search across for DBDs of interest. The DD must be included in the JCL of the component requiring DBDLIB access.
PWX-10173	PowerExchange Express CDC for Oracle now supports Oracle column-level encryption when the new SUPPORT_COL_ENCRYPTION parameter is set to Y in the OPTIONS statement. PowerExchange can then decrypt data in encrypted Oracle source table columns that are captured.
PWX-10158	You can now delete inactive capture registrations from the CCT file by using the PWXUCREG utility.

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Enhancement	Description
PWX-10153, PWX-9928, and PWX-9822	PowerExchange Express CDC for Oracle performance enhancements are included in this release.
PWX-10065	You can run multiple PowerExchange Listeners in the same PowerExchange environment on an IBM i system. You must create a separate message queue in DATALIB for each Listener instance.
PWX-10061	PowerExchange Express CDC for Oracle adds support for Oracle 21c sources on Red Hat Linux and Windows for bulk data movement and CDC. This version is not supported for Amazon RDS for Oracle sources,
PWX-10015	For PostgreSQL CDC, you can use the new CAPTUREALL parameter in the PG CAPI_CONNECTION statement to control whether PowerExchange writes all DML changes from the source database or only the changes from registered source tables to the replication store table.
PWX-10006	The PowerExchange Listener on z/OS has improved memory management, including better messaging and new DBMOVER configuration statements.  The CONVERT_CODEPAGES_WITH_ICONV statement improves memory usage for complex code pages. The Listener suspends acceptance of an incoming PowerExchange task if the address space doesn't have enough extended memory available to run it. The minimum memory defaults to 50MB but can be modified by the JOB_START_MINIMUM_MEMORY_MB statement.
PWX-10000	In the PWXCATMY utility command statement, you can use the new CATEPASSWORD and EPASSWORD parameters to enter an encrypted password for the user who accesses MySQL catalog tables and for the user who connects to the host where the source tables reside.
PWX-9977	To allocate a large format physical sequential (PS) data set, you can now specify DSNTYPE=LARGE in the <b>PWX Override</b> field of the PowerCenter NRDB connection properties.
PWX-9946	For Db2 for i CDC, you can use the new RTNBUFFSIZE parameter in the AS4J CAPI_CONNECTION statement and in the <b>PWX Overrides</b> field of the PowerCenter DB2i5OS CDC application connection to adjust the size of the buffer that is used to collect journal entries that result from PowerExchange calls to the IBM QjoRetrieveJournalEntries API. You can use this parameter to tune performance.
PWX-1229	To perform a database row test on a data map in the PowerExchange Navigator, you had to first send the data map to the remote node. If a later version of the data map resided on the remote node, the version sent from your local machine would overlay it, which could cause problems. With this fix, you can choose whether to use the existing data map on the remote node or send the data map from your local machine. A new preference determines whether only developers who maintain the data maps will be prompted to send the data maps before running the row test.

# **Fixed issues**

The following table describes fixed issues:

Bug	Description
PWX-10308	When running the PowerExchange 10.5.0 or 10.5.1 DTLUCBRG utility, the instance name is not extracted by default.
PWX-10262	While the Db2 for z/OS ECCR is processing a Db2 log record for a table, it might encounter an invalid row length.
PWX-10252	During PowerExchange Express CDC, the PowerExchange Logger fails with the following error:
	PWX-36230 ORAD ERROR: Row Operation error Invalid operation for INSERT (KDO). Op code=11.5 in module PwxOrlOpa:5529.
PWX-10248	During SAP HANA CDC, no rows might be returned when a small MaxTransaction size is specified.
PWX-10236	During SAP HANA CDC, a failure can occur when the calculated field length of 255 bytes exceeds the maximum of 16.
PWX-10230	The z/OS installer upgrade does not list all previous versions.
PWX-10226	For PowerExchange Express CDC for Oracle sources, the PowerExchange Logger captures data in BASICFILE LOB columns but the column data does not appear for row tests in the PowerExchange Navigator.
PWX-10220	For SAP HANA CDC sources, if the APPLICATION_USER column in the PKLOG table is empty, the CDC capture process fails with an internal error.
PWX-10215	During IMS bulk data movement, if a SQL 256 error occurs, no means is provided to determine the status or which segment failed.
PWX-10204	In 10.5.1, the PowerExchange Logger fails if supplemental logging is not enabled for LOB and CLOB columns in PowerExchange Express CDC for Oracle sources.
PWX-10191	When you run the PowerExchange DTLURDMO utility with a Microsoft SQL source, it does not apply the correct NEW_DBID.
PWX-10182	This issue can occur when you run the PowerExchange Listener on z/OS and a subtask tries to write to the buffer of the trace subtask and acquires an exclusive enqueue on the trace serialization resource. The trace subtask detects a file full condition and tries to open the next log file, but the log file does not open. Other subtasks that are waiting on the same enqueue stall and never complete.
PWX-10168	When you use the DTLURDMO utility on a LUW system to copy a data map, if you specify a data map name longer than 10 bytes in a SELECT or EXCLUDE statement, an error message reports that the map name is too long. On LUW, a 13-byte limit is preferable.
PWX-10167	The PowerExchange installer on Windows 2019 fails with the following error:  Flexeraaw_\$aaa: Windows DLL failed to load
PWX-10164	After you use the DTLURDMO utility to migrate registrations from 10.2 to 10.5.1 by copying the CCT file, PowerExchange Navigator row tests and the PowerExchange Logger fail.

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Bug	Description
PWX-10160	In PowerExchange 10.4.1, truncation of a Db2 for i target table causes the PowerCenter session to fail unless a schema override is provided. In prior releases, the schema override was not required if a library list was specified
PWX-10133	If you run the DTLUCBRG utility to change the status of SQL Server capture registrations to inactive or active, the following error occurs:
	PWX-15709 Publication article for database database table table_name failed validation. Reason: Column_name not found.
PWX-10132	In an IMS synchronous CDC environment, a S0C4 abend occurs in the EDMCIRDB module after applying patch P809342.
PWX-10130	On z/OS, LSQA memory leaks in pool zero can occur after SVC99() calls. However, no clear informational messages about the issue are provided.
PWX-10127	For PowerExchange Express CDC for Oracle, an ASM staging file has no effect if the staging file size is greater than the maximum redo log chunk size in the TARGETSIZE parameter and the PowerExchange Logger user does not have write permission on the ASM staging directory.
PWX-10114	When a batch session tries to read Db2 for z/OS compressed image copy with multiple partitions, the session fails due to using the wrong decompression dictionary for data from the previous partition.
PWX-10107	When processing a Db2 for i source, PowerExchange Condense fails if KEY_CHANGE_ALW=Y is specified in the CAPTPARM file.
PWX-10080	For PowerExchange Express CDC for Oracle, the ability to configure memory utilization is needed.
PWX-10078	If a DL/I batch job makes changes to VSAM files from which change data is captured and if a VSAM file is opened prior to an IMS database from which IMS synchronous CDC captures changes, the EDMCICMM module abends with a SOC4.
PWX-10063	In PowerExchange 10.5.1, the PWXEDM172810W message might be issued with a return code of 8 and a reason code of 18, which can lead to delays or hangs in PowerExchange Loggers, Listeners, or ECCRs on z/OS.
PWX-10052	An attempt to delete Db2 for i journal receivers might fail with the following error:
	Failed to open PowerExchange Journal Receiver Lock File.
PWX-10039	Several timeout issues can occur with OBDC data sources on Linux, UNIX, and Windows systems.
PWX-10020	The user ID that accesses the CCT file to read registrations requires the update permission. However, read permission is preferable to implement a more granular security model.
PWX-9999	The DTLURDMO utility's REG_COPY MODIFY FN statement fails to change the registration name if the DBTYPE is VSAM.
PWX-9976	In the RSTRDSUE JCL in the RUNLIB libraray, the HLQ that was entered in the z/OS Installation Assistant was substituted with an incorrect high-level qualifier for the CDEP file.
PWX-9975	SAP HANA CDC processing ends abnormally with stack overflow when processing large UOWs.

Bug	Description
PWX-9972	PowerExchange Express CDC for Oracle encounters the following column conversion error when processing an Update on an IOT table:
	PWX-36219 Column conversion for DATETIME failed.
PWX-9965	In the DBMOVER file, the maximum number of SVCNODE statements is restricted to ten, which is too limiting.
PWX-9942	When the PowerExchange Express CDC for Oracle log reader uses ARCHIVECOPY mode, the PWX-36115 message is incorrectly reported as an informational message and is not written to the error block. CDC processing then terminates.
PWX-9936	PowerExchange Express CDC for Oracle ACHIVECOPY functionality needs some improvements.
PWX-9933	On z/OS, when SMF statistics are being gathered and a task is using more than 40 DBCBs, processing fails because of the following program logic error:
	PWX-00999 Program logic error. Prog="DTLMEM". Line=2444. P1="MEM_Realloc. OldLen=160 NewLen=80 pOldMem=2E014050 Poolid='DTLDMSMF' Old length longer than new length". P2=160.
PWX-9928	For PowerExchange Express CDC for Oracle, improve spill file processing when reading large transactions from Oracle logs.
PWX-9920	For SAP HANA CDC sources that contain TIME columns, PowerExchange replicates the TIME column data incorrectly.
PWX-9912	The maximum capture registration name length that can be entered for IBM i and IBM z/OS CDC sources in the PowerExchange Navigator and DTLUCBRG utility should be increased from 8 to 10 characters.
PWX-9902	For SAP HANA CDC sources, an attempt to generate a trigger script fails for tables with 1000 rows or more.
PWX-9891	The PowerExchange Listener stalls after a trace subtask encounters an error in opening a log file.
PWX-9723	During CICS/VSAM CDC, a backout failure occurs when CICS determines that the EDMKLD70 program running at FC exit point XFCLDEL issues an XPI call to TRACE DOMAIN with more than the maximum data of 4000 bytes.
PWX-9560	For SAP HANA CDC sources, PowerExchange does not support ROW tables.
PWX-8994	Restart of Db2 for i CDC sessions fail if PowerExchange finds multiple journal receivers that match the restart token. With this fix, PowerExchange issues an error message to advise users of the situation.
PWX-8839	If you set the <b>Connection Retry Period</b> property in a PWXPC application connection for a source on UNIX, a fatal error occurs while the connection is being retried.
PWX-1229	To perform a database row test on a data map in the PowerExchange Navigator, you had to first send the data map to the remote node. If a later version of the data map resided on the remote node, the version sent from your local machine would overlay it, which could cause problems. With this fix, you can choose whether to use the existing data map on the remote node or send the data map from your local machine. A new preference determines whether only developers who maintain the data maps will be prompted to send the data maps before running the row test.

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# **Known Limitations**

The following table describes known issues:

Bug	Description
PWX-9939	If you enter a passphrase that includes an apostrophe in the <b>Password</b> field in a PowerCenter application connection, the session fails.  Workaround: Do not specify a passphrase that includes an apostrophe.
PWX-9907	For SAP HANA CDC sources, if the more than one registered table has the same name in different schemas, PowerExchange capture processing fails with a PWX-09964 error message. The error can occur whether the tables are active or history tables.  Workaround: Make sure that each SAP HANA table registered with PowerExchange has a unique name. Reference the schema if possible.
PWX-9859	If your PostgreSQL installation is configured to use the scram-sha-256 password encryption method, PowerExchange database connections will fail.  Workaround: Disable scram-sha-256 encryption by setting password_encryption = md5 in the postgresql.conf configuration.
PWX-9647	During processing, the PowerExchange Listener on IBM i might intermittently hang with a connection error when alternate logging is enabled.  Workaround: Disable alternate logging and try running the job again
PWX-9473	When you run the DTLUCBRG utility to create an IDMS capture registration, DTLUCBRG does not create a correct capture registration even though the job ends with RC=00.
PWX-9014	You cannot view paths for an IDMS capture registration in the PowerExchange Navigator.
PWX-8930	The IMS log-based ECCR REFRESH command causes the ECCR to end abnormally.
PWX-8563	In the PowerExchange Navigator, if you open a Microsoft SQL Server capture registration and click <b>Save</b> , the PowerExchange Navigator creates a new SQL Server article and deletes the previous one even if no changes were made to the registration. The data associated with the previous SQL Server article is deleted.  Workaround: Do not click <b>Save</b> unless you are making changes to the capture registration.
PWX-8527	After a PowerExchange IMS ECCR REFRESH operation, CDC processing might fail with an SVC99 error because of an IMS log deletion.  Workaround: Stop and restart the IMS ECCR and the PowerExchange Listener on the system where change capture occurs.
PWX-8333	During PowerExchange Express CDC for Oracle, a transaction assembler error might occur for indexed-organized tables (IOTs) that contain OVERFLOW tables with chained rows. The following error message is issued:  PWX-36465 ORAD Info: DML sequence error: Subordinate DML sequence and active DML sequence is not only kdolkr/kdolmn/kdollb.
PWX-8097	The PWXUCDCT utility fails with a segmentation fault when running a derive_cdct_backup command and trying to process corrupted PowerExchange Logger log records. The messages that the utility issues do not contain useful diagnostic information.  Workaround: Ensure that the EXT_CAPT_MASK parameter value in the PowerExchange Logger configuration file is correct and that the Logger log files exist.

Bug	Description
PWX-7917	If you select the <b>Pre SQL run once per Connection</b> check box in a PWXPC connection definition for a nonrelational target, any SQL statements that you specify in the <b>Pre SQL</b> connection attribute will not be executed.  Workers and Class the <b>Pre SQL</b> run once per Connection shock box to allow the SQL to run one or
	Workaround: Clear the <b>Pre SQL run once per Connection</b> check box to allow the SQL to run one or more times for the connection.
PWX-7202	If you define a PowerCenter session that uses a PWX NRDB Lookup relational connection and set the TCPIP_OP_TIMEOUT and TCPIP_CON_TIMEOUT overrides in the <b>PWX Override</b> connection attribute, the session fails.  Workaround: Use the connection string to specify the overrides.
PWX-7104	If you issue a pwxcmd command such as displaystats to an ECCR on a z/OS system, the pwxcmd command handler might hang. This problem occurs when the amount of command output is greater than 4 KB.
PWX-7033	If the PowerExchange Agent encounters an error in the DBMOVER configuration file, it does not end processing as expected. As a result, the Agent cannot successfully connect to the PowerExchange Listener for change data capture.
	Workaround: Shut down the PowerExchange Agent by using the SHUTDOWN COMPLETELY command. Edit the DBMOVER configuration file to correct the error and then restart the PowerExchange Agent.
PWX-6917	For PowerExchange on z/OS, if you use the IPV6 protocol for a TCP/IP connection, the IP address is truncated in SMF reports. The connection is not affected, but the IP address is not complete in SMF.
PWX-2031	If you include hidden columns in capture registrations for Db2 for i tables, PowerExchange extraction processing ends abnormally with the following error message for each hidden column:
	PWX-06714 Table schema.table_name Field field_name missing (DB2 for i5/OS CDC)
	This error occurs because PowerExchange cannot detect the hidden columns.
	Workaround: Register tables that contain hidden columns in the PowerExchange Navigator so that you can selectively omit the hidden columns from the capture registrations. (463305)
PWX-1971	If the file permissions on the directory path that is defined in the LOGPATH statement in the DBMOVER configuration file on the Linux Data Integration Service machine are not set correctly, a core dump occurs and a Java Runtime Environment fatal error is reported.
	Workaround: Ensure that the file permissions are not too restrictive. Permissions of 755 are sufficient. (459102)
PWX-1672	A CAPXRT database row test in the PowerExchange Navigator for an IMS complex table source returns no changes even though the PowerExchange Logger for z/OS contains data for the source. This problem occurs when a capture registration is re-created for the source with the same tag name as the previous registration and the new registration includes an additional IMS segment. As a result, PowerExchange cannot map the new registration to the data in the PowerExchange Logger log files.
	Workaround: None available. Contact Informatica Global Customer Support. (409991)

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Bug	Description
PWX-1521	If you capture change data from a Db2 for Linux, UNIX, and Windows source table that uses range partitioning and a DDL operation that adds, attaches, or detaches a partition is performed on the table, data loss might occur and cause data corruption on the target.  Workaround: Do not issue DDL statements that add, attach, or detach a partition for a source table. Alternatively, if you must perform these DDL operations on a source, before you start CDC processing, synchronize the source and target tables by using PowerExchange bulk data movement or another tool. (395055)
PWX-1387	If you use PowerCenter to write Updates to a PowerExchange target and an Update fails, the PowerCenter session log displays an incorrect counts of Update rows in the Load Summary. An Update might fail, for example, because the target record does not exist. (375568)
PWX-1271	When you import a copybook that contains certain German-language characters, such as 'ß' or vowels with umlauts, into a PowerExchange data map, the lines that contain these characters are not imported.  Workaround: If these German-language characters appear within comments, edit the comments to remove or replace the characters. (350646)
PWX-1184	When you create a data map in the PowerExchange Navigator, if you import a PL/I copybook and enter <b>Start</b> and <b>End</b> values that define a column range that includes line sequence numbers, the PowerExchange Navigator might add an extraneous "NEW_RECORD" record and then either fail or produce unpredictable results.  Workaround: When importing a PL/I copybook, do not define a column range or accept a default column range that includes line sequence numbers. (331003)
PWX-1143	When you import a PL/1 copybook for a z/OS source into a data map from the PowerExchange Navigator, the import succeeds, but the import record is not created.
PWX-825	When you run a CDC session that includes a password-protected Adabas data source and uses the CAPXRT access method and offload processing, the session fails. (257540)

**Note:** The current bug tracking system uses bug IDs that begin with the "PWX-" prefix. The previous tracking system used bug IDs that consist of six numbers. For known limitations that carried over from an earlier release and now have a PWX-nnnn bug ID, you can find the previous bug ID at the end of the description in parentheses.

### PowerExchange 10.5.2 Installation and Upgrades

Follow the procedures in the *PowerExchange 10.5.2 Installation and Upgrade Guide* for a full or upgrade installation.

#### **Informatica Global Customer Support**

You can contact a Global Support Center by telephone or through the Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:

https://www.informatica.com/services-and-training/customer-success-services/contact-us.html.

To find online support resources on the Informatica Network, visit  $\underline{\text{https://network.informatica.com}}$  and select the eSupport option.

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