Contents

Read the *Informatica® PowerExchange® Release Notes* to get important information about enhancements, fixed issues, and known issues in PowerExchange 10.5.5. The release notes also include upgrade considerations, if applicable.

To access the PowerExchange 10.5.5 documentation set, browse the Informatica Documentation Portal at https://docs.informatica.com.

Enhancements

The following table describes closed enhancement requests:

Enhancement	Description
PWX-10987	You can run the new ZOSTOUCH utility on a z/OS system where PowerExchange is installed to update the Last Referenced Date (LRD) of selected PowerExchange data sets.
PWX-10985	During a CAPXRT row test, the CAPXRT Advanced Parameters dialog box - General tab no longer uses the CDEP file by default to provide the values of some fields. Now, the **Extract Type** field defaults to CC, and the **Restart Token 1** and **Restart Token 2** fields default to 00. With these defaults, PowerExchange does not open the CDEP file and the row test attempts to extract the CDC data from the earliest available point in time.
PWX-10943	PowerExchange 10.5.5 adds support for CDC for Azure Database for PostgreSQL and Amazon RDS for PostgreSQL sources. For both source types, use the new PG CAPI_CONNECTION REPLSLOTNAME parameter to specify the name of the replication slot to use. If the replication slot does not exist and Azure Database for PostgreSQL or Amazon RDS for PostgreSQL is detected, PowerExchange will create a wal2json slot.

Enhancement	Description
PWX-10911	When **No Progress Update** is selected in the **CAPXRT Advanced Properties - General tab** dialog box, for a row test, the CDEP file is opened in read mode and you do not need to provide RACF UPDATE privileges for the CDEP file.
PWX-10906	When you use the DTLURDMO utility to copy registrations and refresh extraction maps, the extraction maps' before image (BI) and change indicator (CI) extension field values are now retained.

PWX-10876	The following messages were added to provide enhanced information about Db2 for z/OS subsystem connection limits:
	
	`PWX-02282 DB2 subsystem ` *subsystem* ` has reached the maximum connections limit. Completion code ` *return_code* `. Reason ` *reason_code* `.`
	
	`PWX-02283 PowerExchange Listener ` *job_name* ` has ` *number* ` connections to DB2 subsystem ` *subsystem* ` for user ` *user* `.`

PWX-10871	The new SUPPRESS_IBMI_SPLF statement in the DBMOVER member of the CFG file suppresses output written to the IBM i QPRINT queue. Use this statement if you do not periodically clear the output queue of spooled files.
PWX-10838	PowerExchange Express for CDC adds the following enhancements to the log reader: - Improved ASM read rate by using multiple connection threads - The ability to retrieve ASM staging files by using BFILE access instead of requiring network connected storage - The ability to dynamically create or replace directory objects for BFILE reads to support archive logs stored in subfolders
PWX-10792	You can now report LSQA memory pools usage on z/OS by using the PowerExchange Listener DISPLAYSTATS command with the MEMORYPOOLS parameter.
PWX-10760	The PowerExchange Logger for z/OS writes new messages PWXEDM172600W and PWXEDM172601I to the message data set and the z/OS System log to warn you that the current active log is approaching the high limit of its RBA range. Use message PWXEDM172600W in automation monitoring to be alerted well before the active log runs out of RBAs. Optionally, you can set the new *rba_warn* parameter in the PowerExchange Logger JCL to have the Logger write message PWXEDM172600W sooner than it would by default.
PWX-10749	For the IBM i Installer, you can now specify a port number for an IBM i server that is configured to not use the default FTP port number.
PWX-10693	The DTLINFOX report now includes version information for z/OS ASM files. On z/OS, the EDM load modules used by the ECCRs, the PowerExchange Logger, and the agent are included in the report. Patch numbers are reported in the Build version column.

Fixed issues

The following table describes fixed issues:

Issue	Description
PWX-11085	The IMS ECCR abended because of an unexpected return code from the dynamic allocation of an IMS log.
PWX-11015	During job processing for certain PowerExchange Express CDC for Oracle sources, some LOB_IDs are not deleted.
PWX-11008	On Linux, UNIX, or Windows, PowerExchange Express CDC for Oracle CAPI or CAPX capture processing can fail with premature end of file a for a Logger log file in PowerExchange 10.5.4.
PWX-11007	The CAPX reader reads only part of the 4-byte record length from the current condense file and then it ends with a premature EOF.
PWX-10977	On Linux, UNIX, or Windows, if you upgrade PowerExchange from 10.4.1, you cannot start PowerExchange Express CDC for Oracle jobs without a database connection string.
PWX-10973	The DTLSMFRP utility has an incorrect version specified for PowerExchange.
PWX-10947	On z/OS, the PowerExchange Logger for z/OS continues to write each dump file regardless of the z/OS DAE dump suppression facility settings, which results in multiple duplicate dump files. As of PowerExchange 10.5.5, only the first dump file is written, which eliminates duplicate dumps.
PWX-10944	An abend occurs during IMS Synchronous Change Data Capture on z/OS for IMS Batch DL/I jobs running IMS 15.3 or IMS 15.4. **Note:** This enhancement supports IMS Version 14 and IMS Version 15 only.
PWX-10926	PowerExchange Express CDC for Oracle processing might fail in an Oracle RAC environment that uses hardware security module (HSM) and transparent data encryption (TDE) security.
PWX-10905	If you configure a remote PowerExchange Logger for Linux, UNIX, and Windows to capture data from an IMS source on z/OS and perform a row test that uses a WHERE clause with CCK ZONED or UZONED fields to filter data extracted from the log files, the filtering does not work as expected.
PWX-10900	For IMS checkpoint processing, the new DL1_INITIAl_CHKP statement in the DBMOVER configuration member enables you to obtain the initial checkpoint. You can use this checkpoint to recover to the correct point in time if a recovery is necessary.
PWX-10884	When a PowerCenter workflow writes data to a PowerExchange IMS target on z/OS, it might skip good units of works (UOWs) if it encounters an error.
PWX-10881	Messages PWX-04590 and PWX-04565 were not correct. Now, they are replaced by new message PWX-04569, which is logged only when data is extracted: `PWX-04569 Regn tag `*`registration _tag`*` Last data extracted at sequence `*`hex_sequence_value`*` restart `*`hex_restart_value`*` This message provides the sequence value and restart token at the point where data was last extracted for a registered table where the last data was extracted.
PWX-10852	After upgrading PowerExchange to use the Data Direct ODBC Driver Manager 7.1, attempting to retrieve more than 512 bytes of error message text causes an unexpected memory shutdown on an AIX system with ppc64 architecture.

Issue	Description
PWX-10827	During Db2 for i CDC processing when Update records were dropped, PowerExchange reported that no before image was found for an Update operation. As a result, the target was missing the Update data and became out of sync with the source. Now, the process ends and PowerExchange reports that the registered table was changed to only record after images.
PWX-10823	If a SAP HANA CDC source includes a VARBINARY column with the value of Hex'00', the column is truncated at the point where the Hex'00' value appears during CDC processing.

PWX-10820	In the PowerExchange Navigator, when you modify a data map by importing a COPYLIB for an IMS segment and then close the data map, the following error messages might be displayed. The error occurs if the record had a field declared as a record ID and that field occurs after a variable length field.
	
	`PWX-01530 Integrity checks on map schema_name.map_name have produced the following error:`
	
	`PWX-01512 Field field_name in record record_name: Record Id field must be at a fixed offset.`

PWX-10809	The PowerExchange Express CDC for Oracle reader might fail if it encounters a truncated or invalid archive log copy when running in ARCHIVECOPY mode and no alternate log is available to read.
PWX-10780	When you create a capture registration for an SAP HANA source table, the registration process cannot detect whether the table uses row-based or column-based data storage. As a result, the PowerExchange Logger might fail to connect to the source and issue an error message. PowerExchange 10.5.5 adds a new **Row Table** option in the PowerExchange Navigator **Add Capture Registration - Type** dialog box to identify tables that use row-based storage.
PWX-10575	If you see the following message when you open an IMS data map in the PowerExchange Navigator, you need to modify the **Key** field value in the segment record properties: `PWX-01574 IMS datamap regress.bigims32.dmp field BRTKEY has search field type 'S' which is deprecated. Please change to 'U'` In this message, regress.bigims32.dmp is the data map name and BRTKEY is the key field for one of the segments.
PWX-10348	The PowerExchange Agent for z/OS abends with a SO52 abend code, return code RC=102 at startup when the AGENTCTL parameter is set to CCVActive=YES. The abend occurs because the agent did not complete initialization and is not configured to make MVS program calls.
PWX-7793	For CICS/VSAM ECCR processing on z/OS, File Control I/O operations attributes are not correctly validated. Incorrect validation can result in CDC not capturing all updates.
PWX-2543	When you create a Db2 data map and select a Db2 table that contains a column name that is a reserved SQL word, a mismatch can occur during data map processing if the reserved word generates a unique column name that no longer matches the definition in the data map.

Known issues

The following table describes known issues:

Issue	Description
PWX-11139	In the PowerExchange Navigator, if you perform a row test of an extraction map or data map with the **Fetch** field set to an option other than Data and then reset the **Fetch** field to Data and click **Go** again, the generated SQL query is incorrect and will return incorrect results. Workaround: Perform the row test again.
PWX-11123	In PowerExchange 10.5.5 when a capture registration exists and you update the capture registration where you either select or clear the **Row Table** option and then perform a row test, the PowerExchange Navigator shuts down unexpectedly. This issue affects a registration where the row or column table value is changed in the capture registration **Resource Inspector** window. This issue affects SAP Hana trigger-based CDC only. Workaround: Delete both the capture registration and extraction map and then re-create the capture registration with the correct **Row Table** setting for the row or column table in the **Add Capture Registration** dialog box before you click **Next**.
PWX-11070	If you use a Db2 for z/OS FlashCopy image copy of a Huffman compressed table space as a source, the calculated number of dictionary pages to read for caching the compression or expansion dictionary prior to reassembly and extraction processing might be incorrect. An incorrect page count can result in a program logic error. Workaround: None.
PWX-10571	When you run the PowerExchange Logger for LUW to capture changes from SAP HANA sources, if you specified the PARMFILE parameter in the HANA CAPI_CONNECTION statement in the dbmover.cfg configuration file and also set the PWX_HOME environment variable, the value of PWX_HOME will be prepended to the value given by PARMFILE. If the value of PARMFILE contains a full path, then loading of the PARMFILE will fail. Workaround: If you specify PWX_HOME, ensure the PARMFILE is located in the PWX_HOME directory and the value of PARMFILE contains the file name only.
PWX-10034	If you selected the **Full Audit** option in a capture registration for a SAP HANA CDC source, the shadow _CDC table and SAP HANA triggers are generated when the PowerExchange Logger for LUW starts. However, if a shadow_CDC table was dropped and one or more of the corresponding triggers still exist, the table is not created. If the PowerExchange Logger then tries to restart from an earlier restart point without a shadow _CDC table, it ends abnormally. Workaround: Before starting the PowerExchange Logger, either manually re-create the shadow _CDC table or drop the triggers.
PWX-9939	If you enter a passphrase that includes an apostrophe in the **Password** field in a PWX application connection in PowerCenter, the session fails. Workaround: Use a passphrase that does not include an apostrophe.
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 PowerExchange CDC for Db2 for i processing, the PowerExchange Listener on IBM i intermittently hangs if alternate logging is enabled. A connection error is issued. Workaround: Disable alternate logging and try running the job again.
PWX-9014	If you select **View Paths** for an IDMS capture registration in the PowerExchange Navigator, the parent hierarchy for the IDMS base record is not displayed.

Issue	Description
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 **Save**, 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 **Save** 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.
PWX-7917	If you select the **Pre SQL run once per Connection** check box in a PWXPC connection definition for a nonrelational target, any SQL statements that you specify in the **Pre SQL** connection attribute will not be executed. Workaround: Clear the **Pre SQL run once per Connection** 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 **PWX Override** 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.

Issue	Description
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.
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.
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.
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.
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.
PWX-1184	When you create a data map in the PowerExchange Navigator, if you import a PL/I copybook and enter **Start** and **End** 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.
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.

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 10.5.5 Installation and Upgrades

Follow the procedures in the *PowerExchange 10.5.5 Installation and Upgrade Guide* for a full or upgrade installation.

Upgrade Considerations

Updated Components in the PowerExchange ECCR CRG.LOAD Library for IMS Synchronous CDC

PowerExchange 10.5.5 contains components of the BMC Software BMC AMI Online Reorg for IMS and BMC AMI Database Integrity for IMS products. PowerExchange provides the latest available version of these components in support of IMS 15.3 and IMS 15.4.

If you use one of the BMC Software products, ensure that the product meets the minimum version that PowerExchange requires for IMS synchronous CDC, as described in the "IMS Synchronous Change Data Capture" chapter of the *PowerExchange CDC Guide for z/OS*.

If you use the CRG software, after you upgrade PowerExchange, run the CRGUMOD or CRGCLINK job in the *hlq*.SAMPLIB library again to install DBRC modifications. Otherwise, events such as abends might cause CDC to fail in the DLIODDCx module when the IMS synchronous ECCR tries to capture changes for a source segment. After you run the CRGUMOD or CRGCLINK job, restart the IMS control region.

Informatica Global Customer Support

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

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