Pro*COBOL®

Release Notes

12*c* Release 1 (12.1)

E18407-06

April 2013

About these Release Notes

This document contains important information about Pro*COBOL 12*c* Release 1 (12.1).

It contains the following topics:

- Documentation Accessibility
- New Features in Pro*COBOL
- New Features in Previous Releases
- Bugs Fixed
- Support

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New Features in Pro*COBOL

This section briefly describes new features introduced in Pro*COBOL 12*c* Release 1 (12.1).

Support for Auto Increment Columns

Pro*COBOL now supports auto increment columns. This simplifies the development of ticketing, HR, and tracking applications, and assists in migrating databases to Oracle Database.

Support for 32k Columns

Pro*COBOL now supports 32k column data with VARCHAR2, NVARCHAR2 and RAW data. This feature also assists with the migration of databases to Oracle Database.

Support for Prefetch By Memory

New inline and command-line option enables you to specify the memory used for pre-fetching rows. The new MEMFORPREFETCH option will provide assistance in the migration of databases to Oracle Database. The existing PREFETCH option remains unchanged.

Support for SQL Plan Management (SPM)

New command-line options generate plan baseline SQL statements, and control the name and format of generated SQL and LOG files. These new options enhance existing precompiler SQL Plan Management. They provide a means of performance management and assist in the upgrade of compiler applications.

New Features in Previous Releases

This section lists new features introduced to Pro*COBOL in previous releases.

Features in Pro*COBOL 11.2 Production

- Instant Client Mode: Pro*COBOL can run in Instant Client (IC) mode. Developing Pro*COBOL applications in an IC environment is also supported.
- Support for 8-Byte Integers: Previously, the size of integer variable declarations using COMP/ COMPU/COMP-4/ COMP-5/ BINARY storage specification was restricted to 9 digits on 32-bit platforms. Now integers up to 18 digits can be used on all platforms. Declarations greater than 9 and less than or equal to 18 are mapped to C's long long int datatype during code generation.
- Command-line Option for Held Cursor Behavior after ROLLBACK: A new command-line option, CWH_SQL99, sets the ROLLBACK behavior for held cursors. By default, CWH_SQL99, is set to YES and held cursors are closed after ROLLBACK. Set CWH_SQL99 to NO for backward compatible behavior where held cursors remain open after ROLLBACK.

Features in Pro*COBOL 11.1 Production

- SQL99 syntax support: Pro*COBOL now supports SQL99 syntax for SELECT, INSERT, DELETE, and UPDATE statements and the body of the cursor in a DECLARE CURSOR statement.
- Additional array INSERT and array SELECT syntax support: Pro*COBOL now supports the array INSERT and array SELECT syntax of the DB2 precompiler.
- Fix execution plan: To ensure better performance of a Pro*COBOL application during deployment, the 'outline' feature of the database is used to fix the execution plan.
- Implicit buffered insert: Pro*COBOL now supports the implicit buffering of a single INSERT statement executed in a loop.

- Dynamic SQL statement cache: Statement caching improves the performance of dynamic SQL statements.
- Scrollable cursor support: Pro*COBOL now supports a scrollable cursor to fetch data in a non sequential manner.
- Platform endian support: Pro*COBOL now supports retrieving unicode data in OS endian in the PIC N host variable.
- Flexible B Area length for Pro*COBOL: The length of B Area can now be from 8 to 253 columns.

Known Problems

The following section lists known problems in Pro*COBOL.

Known Problems in Pro COBOL Release 12.1

- The VARCHAR variable in a Pro*COBOL program can store up to 9999 (4-digit) characters on a SPARC 64-bit system. This is because the COMP-5 qualifier is not available on a SPARC 64-bit system. This limits the VARCHAR handling capability to 9999 characters by a Pro*COBOL application even if a 32K VARCHAR feature is used while creating a table.

  Workaround: Insert or retrieve data longer than 9999 characters in chunks using LOB read/write support in Pro*COBOL.

Bugs Fixed

The following section lists bugs fixed in Pro*COBOL. Numbers in parentheses following the description refer to bug numbers in the Oracle Bug Database.

Bugs Fixed in Pro*COBOL Release 12.1

- Pro*COBOL no longer crashes while parsing long token/ SQL statement (13006848)
- Pro*COBOL no longer returns PCB-S-400 when precompiling SQL that includes an inline view written as embedded SQL (EXEC SQL), in-spite of using common_ parser=yes (12641413)
- Pro*COBOL no longer throws PCB-0400 error when using numeric as first character of a group element (10265545)
- Pro*COBOL on Windows no longer crashes when option comp1=integer is set (10040552)
- Pro*COBOL no longer returns ORA-6502 with PL/SQL bind (9905110)
- Pro*COBOL no longer crashes when a large source file contains a large number of host variables (9689604)
- Pro*COBOL now parses statements with a double dot after a COBOL COPY clause after installing patch 9218271 (9470397)
- Pro*COBOL no longer generates illegal values when a statement is declared at a remote DB and then prepared by passing a string instead of bind-var) (9402996)

- Pro*COBOL non longer fails with ORA-12899 when max_rows_insert is set (9381997)
- Pro*COBOL non longer returns PCB-S-00214 when JUSTFIED clause is used with host variables (9266470)
- Pro*COBOL no longer returns PCB-S-400 error if SCREEN SECTION is used (9151190)
- Pro*COBOL no longer returns PCB-W-233 when host variable was used for AT clause (9147830)
- Pro*COBOL no longer returns PCB-S-400 when COPY is used in OCCURS clause of an array declaration (9128157)
- Pro*COBOL no longer returns PCB-S-400 when a COPY statement ends with double dots (9055457)
- Pro*COBOL now correctly translates SQL statements which contain a list of lists (8932394)
- Pro*COBOL no longer returns ORA-933 when cursors are declared with outline enabled (8770900)
- Pro*COBOL no longer returns PCB-S-00400 when an EXE SQL INCLUDE statement is used without an ending period in DATA SECTION (8713408)

Bugs Fixed in Pro*COBOL Release 11.2

- Pro*COBOL no longer fails with SIGSEGV when attempting to select an integer into a PIC N variable (8285576)
- Pro*COBOL no longer flags a syntax error for the use of "CREATE SCHEMA … " in an EXEC SQL … statement (7644365)
- Pro*COBOL no longer flags a syntax error for the use of "CREATE TABLE … " in an EXEC SQL … statement (7644387)
- Pro*COBOL no longer flags a syntax error for the use of "CREATE VIEW … " in an EXEC SQL … statement (7644423)
- Pro*COBOL no longer flags a syntax error for the use of "CREATE VIEW … WITH CHECK OPTION" in an EXEC SQL … statement (7644449)
- Pro*COBOL no longer goes into memory fault while pre-compiling huge files (more than 65K lines) with the EXEC SQL INCLUDE directive (7557301)
- When an EXEC SQL statement is used with an EXEC SQL INCLUDE statement in an "EXEC ORACLE IFDEF XYZ" block, Pro*COBOL no longer loses track of whether the macro "XYZ" is defined or not, and no longer includes the files mentioned in the EXEC SQL INCLUDE statement when not expected (7484318)
- When PICN_ENDIAN=OS is set, Pro*COBOL no longer tries to do conversion that results in truncation of length (7306555)
- REPLACE statements with longer pseudo-texts no longer causes Pro*COBOL precompilation to crash on certain platforms (7288085)
- Instant Client support for Pro*COBOL application execution (run time) and application development is now available on UNIX or Windows platforms (7045925)

- When DML statements are issued with a RETURNING clause in a Pro*COBOL application, the application now receives all rows affected by the DML statement (7029239)

Support

For Pro*COBOL support, contact your local Oracle Support Services Center.

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