

Release Notes

About these Release Notes

This document contains important information about Pro*C/C++ release 18c, version 18.1.

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Compatibility and Migration Issues

This section describes compatibility issues when migrating from earlier releases of Pro*C/C++.

Compatibility Between 32 Bit and 64 Bit Implementations

On platforms which support both 32 bit and 64 bit implementations, you must re-compile your applications which include `sqlca` via an `EXEC SQL INCLUDE` statement before linking with the 64 bit binaries. For applications which include `sqlca.h` via the `#include` preprocessor statement, you must recompile to include the 64 bit `sqlca.h` before relinking with the 64 bit binaries.

In the future, to support generated code compatibility across implementations, only one version, the 64 bit version, of `sqlca.h` may be supplied on ports which support both 32 bit and 64 bit binaries.

Pro*C/C++ Configuration File

The Pro*C/C++ configuration file `precomp/admin/pcscfg.cfg` needs to be updated with the appropriate path for `sys_include` option. Environment variables can be used to specify the path, e.g, `$ORACLE_HOME` for Unix systems and `%ORACLE_HOME%` for Windows. Your include option should also be updated appropriately.

```
sys_include=($ORACLE_HOME/precomp/public,/usr/include)
<pre>sys_include=/usr/lib/gcc/i386-redhat-linux/4.1.1/include
<pre>include=($ORACLE_HOME/precomp/public)
<pre>include=$ORACLE_HOME/precomp/hdrs
```

LTYPE=SHORT

Setting the `LTYPE=SHORT` option causes `.lis` files to be generated using the verbose form rather than the expository form in which the entire program is listed.

New Features in Pro*C/C++ Release 18c, Version 18.1

The following feature is new in this release:

- Support for Oracle Connection Manager in Traffic Director Mode
Oracle Connection Manager in Traffic Director Mode is a proxy that is placed between supported database clients and database instances for improved high availability, connection multiplexing, and load balancing.

New Features in Previous Releases

This section lists new features introduced to Pro*C/C++ in previous releases.

Features in Pro*C/C++ 12.2 Production

- Support for long identifiers (object lengths of 128 bytes). In previous releases, the object length limit was 30 bytes.
- Support for Oracle Instant Client - Basic Light version.
- New command line option, `trim_password`, to prevent authentication issues caused by password strings that contain trailing blank space.
- Pro*C/C++ Compatibility with vc12 (Visual Studio 2013 compiler).

Features in Pro*C/C++ 12.1 Production

- Support for Auto Increment Columns
- Support for 32k Columns
- Support for Prefetch By Memory
- Support for SQL Plan Management (SPM)

Bugs Fixed

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

Bugs Fixed in Pro*C/C++ Release 12.2 Production

- Pro*C/C++ no longer throws CSF-S-00000 error when `common_parser=yes` in the `timezone.pc` file (9531787)
- Pro*C/C++ no longer throws ORA-01008 error when binds are used in the Select list while `common_parser=yes` (14127422)
- Pro*C/C++ no longer throws ORA-932 error when precompiling with option `USERID` and `common_parser=yes` for an INSERT statement which has CASE clause and `TIMESTAMP` function (14335958, 19473788)
- Pro*C/C++ no longer fails to set `SQLSTATE` during rollback, with `MODE=ANSI` and without declaring `SQLCODE` (5891984)
- Pro*C/C++ no longer throws ORA-538976288 error when using a "SELECT INTO" statement for PIC N variable (17189633)
- Pro*C/C++ no longer throws PCB-S-00400 error while precompiling a program with a Level 88 initialised variable (20194289)
- Pro*C/C++ no longer fails to parse Solaris platform-specific keyword `__thread` (20901503)
- Pro*C/C++ demo makefiles from Oracle Instant Client now allows the user to specify the GCC path (14591784)
- Pro*C/C++ no longer truncates strings while fetching data from a long column into a long variable (13589112)
- Pro*C/C++ `Nvarchar2` object is now correctly mapped to `nvarchar2` data type (11653552)

- Pro*C/C++ now supports OCIRaw processing in the EXEC SQL OBJECT GET construct (11653512)
- Pro*C/C++ is now shipped with generic demo files instead of OSD files, and old unused files are no longer shipped (9909411)
- Pro*C/C++ now handles parsing of lengthy numeric values (9814506)
- Pro*C/C++ now accepts the TYPE token in the IS OF clause (9535800)
- Pro*C/C++ now correctly interprets a newline character between single quotes in SQL statements (9531904)
- Pro*C/C++ no longer has memory corruption issues when processing SQL statements containing N'string' (9531638)
- Pro*C/C++ now recognizes the CURSOR WITH HOLD option when parser unification is enabled (8436316)
- Pro*C/C++ now passes the correct "mode" parameter value to OCIStmtFetch2() (18509872)
- Pro*C/C++ now frees up the memory allocated to column properties (20051833)
- Pro*C/C++ no longer fails with ORA-1008 error after encountering ORA-942 error when a table is dropped (20029428)
- Pro*C/C++ no longer throws PCC-S-2201 error while parsing cursor with hold syntax in unified parser mode (20534275)
- Pro*C/C++ no longer throws PLS-S-201 error when compiling with common_parser=No (20808657)
- Len attribute of Varchar structure no longer gets corrupted during batch fetching of rows (14013076)
- Pro*C/C++ no longer throws a segmentation fault when precompiling a long filename (12565588)

Bugs Fixed in Pro*C/C++ Release 12.1

- Pro*C/C++ parser no longer fails when both outline and common_parser are set to 'yes' (12819524)
- Pro*C/C++ no longer generates the ANSI prototypes for public APIs when the Precompiler option 'code' is set to 'kr_c' (10250555)
- XA application no longer crashes after upgrade to 11.2 (10086495)
- Obsolete Sun SPARC compiler option 'dalign' removed from Pro*C/C++ demo make file (9590964)
- EXEC SQL COLLECTION GET from VARRARY(5) of CHAR(5) now behaves correctly (9531014)
- On 64-bit platform SQLSQLDAAlloc() no longer returns an invalid descriptor handle (9491931)
- Pro*C/C++ no longer crashes on HP-UX after upgrading to 11g (7365514)

Known Bugs

The following section lists known bugs in Pro*C/C++. Numbers in parentheses following the description refer to bug numbers in the Oracle Bug Database.

Known Bugs in Pro*C/C++ Release 12.2

- ORA-00942 error is thrown while running a query that selects values from an XML table in online mode (9535704)
- PCC-S-2322 error is thrown while executing an embedded SQL statement that contains a macro (9970779)
- PCC-S-02201 error is thrown due to a c99 compliance issue with the stdbool.h file (12866048)
- Implementation of GCC extension `#include_next` needs to be modified in order to correctly include a file in multiple paths (21414819)
- Certain DDL statements are incorrectly parsed (20857434)
- PCC-S-02201 error is thrown while parsing the DDL statement "CREATE GLOBAL TEMPORARY TABLE" (20857400)
- PCC-S-02201 error is thrown while parsing the DDL statement "CREATE ROLE" (20857370)
- Oracle Social Network does not support special character "@" in passwords (20809065)

Support

For Pro*C/C++ support, please contact your local Oracle Support Services Center.

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