Database Programming with PL/SQL

15-3: Using Conditional Compilation

Practice Activities

Vocabulary

Identify the vocabulary word for each definition below.

USER_SOURCE	data dictionary view to see the complete source code, including the compiler directives, for a stored PL/SQL unit
Conditional Compilation	allows you to include some source code in your PL/SQL program that may be compiled or ignored by the compiler depending on a value checked at compilation.
Inquiry and Selection Directives	used in conditional compilation
DBMS_DB_VERSION	package specifies the Oracle version numbers and other information useful for simple conditional compilation selections based on Oracle versions.
DBMS_PREPROCESSOR	is the data dictionary view to see how a PL/SQL program was compiled.
PLSQL_CCFLAGS	provides a mechanism that allows PL/SQL programmers to control conditional compilation of each PL/SQL library unit independently.

Try It / Solve It

1. In your own words, describe two benefits of using conditional compilation methods. 2

Para verificar si en esa determinada versión de office se puede ejecutar el código.

Se puede activar las declaraciones de depuración o rastreo para que se ejecuten en el desarrollo entorno e ignórelos automáticamente cuando ejecute la aplicación en un sitio de producción.

2. Create a procedure named my_debug_proc with the following features:

    - Code that saves the number of departments in a variable called v_count.
    - A conditional compilation flag named debugFlag.
    - A message that displays to the screen when debugFlag is TRUE to indicate debugging is turned on and the value of v_count.
    - A message that displays to the screen when debugFlag is FALSE to indicate debugging is turned off. Do NOT display v_count when debugFlag is FALSE.

    Set the conditional compilation flag to TRUE, compile your code, and view the compiled source code to determine that your code compiled as intended. You may need to pause a few seconds between setting the flag's value and recompiling your code.

    Run your procedure to see the output.

    Query USER_PLSQL_OBJECT_SETTINGS to see the debugFlag value used in compilation.

    Set the conditional compilation flag to FALSE, compile your code, and view the compiled source code to determine that your code compiled as intended. You may need to pause a few seconds between setting the flag's value and recompiling your code.

    Run your procedure to see the output.

    Query USER_PLSQL_OBJECT_SETTINGS to see the debugFlag value used in compilation.

3. Create a procedure version_proc that performs the following actions:

- Prints to the screen the current version of the Oracle database.
- If the version is prior to version 11, an additional message should say that new performance features are available in release 11, so consider upgrading the database.

View the compiled source code to determine that your code compiled as intended.