Pay002.sqr Documentation

A report that prints employee pay details by company, pay end date, pay group, and department

# Introduction

This document describes the purpose, logic, and structure of the pay002.sqr.docx program. It also provides information on the input parameters, output format, and error handling of the program. The document is intended for developers, testers, and users who need to understand the functionality and maintenance of the program.

# Program Overview

The pay002.sqr.docx program is a report that prints employee pay details by company, pay end date, pay group, and department. The report shows the following information for each employee:

* Name, form ID, employee ID, department ID, business unit, check date, check number, pay sheet source, and pay check option
* Regular hours and earnings, overtime hours and earnings, other hours and earnings, and gross pay
* Taxes, deductions, and net pay
* Pay distribution details for advice and check pay check options

The report also prints subtotals and totals for each company, pay end date, pay group, and department. The report can be run for a range of pay end dates, pay groups, and page numbers. The report can also be run for off-cycle or regular payrolls, or both.

# Program Structure

The pay002.sqr.docx program consists of the following main sections:

* Include files: The program includes several standard and custom include files that contain common variables, procedures, and functions.
* Report initialization: The program initializes the report parameters, environment variables, and arrays. It also calls the Get-Run-Control procedure to retrieve the run control values from the database.
* Report heading: The program prints the report title, subtitle, date, time, page number, and column headings. It also prints the run control values and the report language.
* Report procedure: The program executes the main SQL query that retrieves the pay data from the PS\_PAY\_CALENDAR, PS\_PAY\_CHECK, PS\_PAYGROUP\_TBL, PS\_PAY\_EARNINGS, PS\_PAY\_OTH\_EARNS, PS\_PAY\_TAX, PS\_PAY\_TAX\_CAN, PS\_PAY\_DEDUCTION, PS\_DEDUCTION\_TBL, and PS\_PAY\_GARNISH tables. The program also calls several sub-procedures to process the pay data, such as:
* Init-Report: This procedure initializes the report variables and arrays.
* Report-Translation: This procedure reads the language-dependent text from the database and assigns them to the report variables.
* Array-Initialization: This procedure creates and initializes the arrays that store the totals and the earnings, taxes, and deductions details.
* Get-Pay-Earnings: This procedure retrieves the regular, overtime, and other earnings for each employee and stores them in the ETDarray.
* Get-Other-Hours-Earnings: This procedure retrieves the other earnings codes and amounts for each employee and stores them in the ETDarray.
* Process-Reversal: This procedure handles the pay check reversals and prints the reversal amounts and indicators.
* Get-Original-Check: This procedure retrieves the original pay check details for the reversed pay check and calculates the reversal amounts.
* Get-Original-Distribution: This procedure retrieves the original pay distribution details for the reversed pay check and calculates the reversal amounts.
* Get-USA-Taxes: This procedure retrieves the USA taxes for each employee and stores them in the ETDarray.
* Get-CAN-Taxes: This procedure retrieves the Canada taxes for each employee and stores them in the ETDarray.
* Get-Deductions: This procedure retrieves the deductions for each employee and stores them in the ETDarray. It also calls the Get-Garnishment-Detail procedure to handle the garnishment deductions.
* Get-Garnishment-Detail: This procedure retrieves the garnishment details for each employee and stores them in the ETDarray.
* Get-Pay-Distribution: This procedure retrieves the pay distribution details for each employee and calculates the check and deposit amounts.
* Print-Detail: This procedure prints the pay details for each employee from the ETDarray.
* Company-Change, PayEndDate-Change, PayGroup-Change, Department-Change: These procedures handle the breaks on company, pay end date, pay group, and department, and call the Print-Totals procedure.
* Print-Totals: This procedure prints the subtotals and totals for each break level and resets the totals arrays.
* Reset: This procedure sets the end of report flag and prints the message catalog text if any.
* Report footing: The program prints the report legend and the end of report indicator.

# Input Parameters

The pay002.sqr.docx program accepts the following input parameters:

* Process Instance: A unique identifier for the program run.
* Calendar ID: The pay calendar ID for which the report is run.
* Pay End Date From: The starting pay end date for the report.
* Pay End Date Thru: The ending pay end date for the report.
* Pay Group From: The starting pay group for the report.
* Pay Group Thru: The ending pay group for the report.
* Page Number From: The starting page number for the report.
* Page Number Thru: The ending page number for the report.
* Off Cycle: The indicator for the off-cycle payroll. Valid values are A (all), Y (yes), and N (no).

# Output Format

The pay002.sqr.docx program produces a report that is formatted as follows:

* The report has a title, subtitle, date, time, page number, and column headings.
* The report shows the run control values and the report language.
* The report prints the employee pay details in a tabular format, with one row per employee.
* The report prints the subtotals and totals for each company, pay end date, pay group, and department.
* The report prints the report legend and the end of report indicator.

# Error Handling

The pay002.sqr.docx program handles the following types of errors:

* Invalid input parameters: The program validates the input parameters and displays an error message if they are missing or invalid.
* No data found: The program displays a message if no data is found for the given input parameters.
* SQL errors: The program displays the SQL error code and message if any SQL statement fails.
* Array overflow: The program displays a message if the ETDarray exceeds its maximum size.
* Message catalog errors: The program displays a message if the message catalog text is missing or invalid.

Test cases

Run the program with valid input parameters and check if the report is generated correctly.

Run the program with invalid input parameters and check if the appropriate error messages are displayed.

Run the program with different combinations of off-cycle, pay group, and page number options and verify the results.

Run the program with various languages and check if the report translation is accurate and consistent.

Run the program with different dates and check if the data is retrieved from the correct tables and fields.

Check if the report formatting, alignment, spacing, and pagination are correct and follow the specifications.

Check if the report totals, subtotals, and calculations are correct and match the expected values.

Check if the report handles SQL errors, array overflow, and message catalog errors gracefully and displays the relevant information.

Check if the report handles different types of taxes, deductions, earnings, and pay distribution correctly and prints them in the right columns.

Check if the report handles reversals, unconfirmed payments, advice, and check numbers correctly and prints them in the right columns.