

Introduction to RPG IV Programming

(RG35)

5 Days (40% Lecture, 60% Workshop)

This class provides an introduction to RPG IV programming on the IBM i (iSeries and AS/400). No previous knowledge of RPG is required or assumed. This course covers both Fixed format and /FREE format with an emphasis on /FREE format, with the most modern language enhancements.

Prerequisites: A basic knowledge of computer programming as well as these tools from IBM: Source Entry Utility (SEU) and Programming Development Manager (PDM).

Course Outline

Introduction to RPG IV

RPG IV Heritage
Programming Design Steps
RPG IV Specification Overview

Data Definition

Data Definition Methods
Definition Specification
Work Fields
Data Structures
Named Constants
Indicators

Calculations and Basic Operations

Arithmetic Operations
Assignment Operations
EVAL Operation and Expressions
/Free format options in C Specs

Conditional and Iterative Operations

IF/ELSE Operations
SELECT/WHEN/OTHER Operations
DO/DOU/DOW/FOR Operations
ITER/LEAVE Operations

File Processing

RPG Logic Cycle
File Specifications
Full Procedural Processing
Keyed Processing
CHAIN Operation
READ/READP Operations
SETLL/SETGT/READE/READPE
WRITE/UPDATE/DELETE Operations
Error Handling
EXCEPT Operation
Fundamental File Loop
Output Specifications

Advanced File Processing

Processing Partial Files
Key Lists
Complex & Multiple File Processing

Arrays and Tables

Defining Arrays
Initializing Arrays
Runtime vs. Compile Time Arrays
LOOKUP/XFOOT/MOVEA Operations
Tables and LOOKUP

Printing Reports

Program Described Printing in O Specs
Externally Described Printer Files
Intro to DDS for Printer Files
Handling Page Overflow

Interactive Workstation Programming

Screen Design Aid and Display File DDS
Screen Record Formats
Using Function Keys
Using and Editing Input Output Fields
Fundamental EXFMT Loop

Modular Programming

Using Internal Subroutines
Subroutine Flow of Control
Executing External Programs
CALL Operation
Passing Parameters
*ENTRY PLIST Operation
Prototype/Procedure Interface Definition
CALLP Operation

Compiling RPG IV Programs

Compile Step
Binding Step
CRTBNDRPG Command
Creating Modules
Combining Multiple Modules

Introduction to Sub-procedures

Subroutines vs. Sub-procedures
Coding Procedures within a Program
Coding Procedures in a Separate Modules
Passing Parameters by Reference/Value
Other Prototyping Options

For more information, call (314) 932-2430 or (800) 936-3140

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