

RPG IV and the Integrated Language Environment

(4 day Instructor-Led Course)

Course Description

This RPG IV "jump start" class presents RPG IV (ILE RPG/400) and Integrated Language Environment (ILE) concepts for programmers who already know RPG III (RPG/400). The class covers RPG IV syntax, definition specifications, free-format coding, built-in functions, indicator-less programming, date processing, procedures, activation groups, modules, service programs, debugging, and all the topics you'll need to bring you up to speed on the new RPG syntax.

Who Should Attend

This class is primarily for existing RPG III programmers, but is also appropriate for RPG IV programmers who need to fill in their RPG knowledge about modular programming and ILE concepts.

Prerequisites

In order to successfully complete this course, students should have completed the following courses, or have equivalent knowledge/experience:

- iSeries Concepts and Programming Tools
- Introduction to RPG III
- Interactive programming with RPG III

What You Will Accomplish

At the end of the course, students will be able to:

- Code a program using RPG IV syntax
- Organize program data item definitions using D-specifications
- Recognize and use built-in functions appropriately
- Write free format RPG code without using indicators
- Understand the ILE two-step compile-and-bind model for creating programs
- Write modular, reusable procedures
- Understand the purpose of a prototype, and the difference between parameters and a return value
- Write a "wrapper" procedure to simplify API integration
- Create and maintain service programs
- Know the difference between a binding directory and binder language, and when to use each one
- Debug a program interactively using the ILE debugger
- Understand activation groups, what they affect, and how to use them

What You Will Receive

Each student receives:

- Custom printed handout, containing class notes
- Completion certificate

Follow-Up Courses

- RPG IV Programming with Embedded SQL

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Course Outline

The class covers these topics:

- RPG IV Syntax Overview
- Defining Data with D-Specifications
- Calculations and Expressions
- Using Built-in Functions
- Indicator-less Programming
- Free Format Coding
- Processing Dates
- Converting to RPG IV
- Compiling ILE Programs
- Using the ILE Debugger
- Introduction to Procedures
- Modular Procedures
- Using a Binding Directory
- Advanced Prototyping Topics
- Using Procedures with APIs
- Creating Service Programs
- Using Binder Language
- Introduction to Activation Groups

Hands-on Labs

- Introduction to RPG IV Syntax
- Calculations and Expressions
- Built-in Functions and “No Indicators” Programming
- Free Format Coding
- Date Processing
- Coding Local Procedures
- Coding Modular Procedures
- Advanced Prototypes and Modular Procedures
- Creating and Maintaining Service Programs
- Using the ILE Debugger