Licensed ProgramSpecifications



IBM Compiler for SAA REXX/370 IBM Library for SAA REXX/370 Release 3

Program Number 5695-013 (Compiler) 5695-014 (Library)

The IBM* Compiler for SAA* REXX/370 (the Compiler) translates REXX source programs into compiled REXX programs. The IBM Library for SAA REXX/370 (the Library) contains common routines that compiled REXX programs call.

The Compiler, the Library, and the compiled REXX programs run under the MVS/ESA* operating system with TSO/E, or under CMS on the VM/SP, VM/XA* SP, or VM/ESA* operating system. REXX programs compiled under MVS/ESA or CMS run under VSE/ESA*, if REXX/VSE is installed.

Features

The following enhancements have been made in Release 3:

- ★ The TRACE instruction and the TRACE built-in function are supported, (except for trace setting SCAN) provided that the TRACE Compiler option is used.
- The stream I/O built-in functions (LINES, LINEIN, LINEOUT, CHARS, CHARIN, CHAROUT, and STREAM), PARSE LINEIN, and the corresponding exception handling (CALL ON NOTREADY and SIGNAL ON NOTREADY) are supported on VM/ESA Release 2.1 and subsequent releases.
- An Alternate Library has been introduced to enable users who do not have the IBM Library for SAA REXX/370 installed to run compiled REXX programs. Software developers can distribute the Alternate Library, free of charge, with their compiled REXX programs.
- ★ The %COPYRIGHT Compiler control directive inserts a copyright notice in the form of a visible text string in both the CEXEC and OBJECT output of the compiler.

- The %INCLUDE Compiler control directive inserts, at compilation time, REXX code contained in MVS data sets or in CMS files into the REXX source program.
- The MARGINS Compiler option specifies the left and right margins of the REXX program. Only the text contained between the specified margins is compiled.
- The IEXEC Compiler option produces output that contains the expanded source of the REXX program being compiled. Expanded means that the main program and all the parts included at compilation time are contained in the IEXEC output. If the MARGINS option is active, only the text within the specified margins is written to the IEXEC output.
- The readability of Compiler listings is improved.

Supports SAA REXX interface definition: Most interpretable REXX programs can be compiled and run without requiring changes.

Improves runtime performance: Most compiled REXX programs run faster than interpreted REXX programs. The amount of improvement depends on the REXX language elements used.

For example, the greatest improvement is shown in programs that contain many integer arithmetic operations; the least improvement is shown in programs that issue mainly host commands.

Typically, compiled REXX programs run between two and severn times faster than interpreted REXX programs.