SOFTWARE

ANSI Standard Cobol Compiler

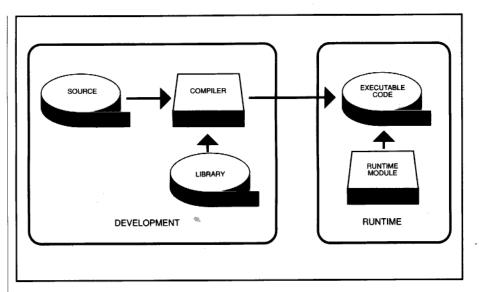
■ RM/Cobol compiler ■ RM/Cobol runtime

RM/Cobol is an ANSI Standard Compiler designed for developing and executing professional Cobol business applications on mini and micro computer systems. RM/Cobol is a GSA certified implementation of the ANSI X3.23 74 Cobol standard.

This single pass compiler generates object and listing files concurrently. On completion, it reports compilation results to the standard error file and returns control to the operating system. Compilation always proceeds to the end of the program, regardless of the number of source errors found. The result is quick compilation.

The program listing that is generated includes all RM/Cobol source statements, error information, data allocation, interactive debug information and, optionally, a cross reference of program labels and data items. This gives the programmer an excellent opportunity to see the full program and all errors.

The generated object file is in a form ready for immediate execution by the RM/Cobol Runtime Program. An attempt to execute a program containing an error statement will stop the program and write an error message to the user.



Runtime

When the program is compiled without any errors it can be executed by the Runtime System. Once invoked, the Runtime System loads and executes the compiled object, including any required segments. Concurrently, it allocates memory for file buffers, and CALLed RM/Cobol or C language subprograms. On completion, control is returned to the operating system.

Debug

RM/Cobol Interactive Debug is easily invoked by a user specified option on the RUNCOBOL statement. Debug is given control and supervises the execution of the user's program. All debug commands and resultant displays are achieved through standard input and output devices, thus allowing the programmer to interact with the program.

RM/Cobol features

- Full Level 2 relative and indexed file access methods
- Multi-keyed indexed files may have 14 ALTERNATE KEYS, including DUPLICATES.
- Record and file-level locking sup ports multiuser activity and shared files.
- Variable names in SELECT and CALL statements allow files and CALLed programs to be specified at execution time.
- Full arithmetic capability, including CORRESPONDING and COMPUTE.

- COPY statement allows for direct copying of source code from another file during compilation.
- Compact object code, segmentation, and dynamic memory management dramatically reduce storage requirements, thus allowing the execution of very large applications.
- No link-edit step required for program execution, saving disk storage and program maintenance time.
- Comprehensive, easy-to-understand messages with errors marked in the source listing.
- For faster debugging, a cross reference feature identifies all points where data and paragraph names have been defined, referenced or changed.
- Powerful interactive screen handling capabilities increase flexibility and speed in program development:
 - set multiple breakpoints, or
 - step through program one statement at a time, or
 examine/change value of data
 - tems during execution.
- Allows the option of distributing application in object code to protect source from unauthorized revision.

RM/Cobol statements

PROGRAM-ID, AUTHOR, INSTALLA-TION, DATA-WRITTEN, SECURITY, CONFIGURATION SECTION, SOURCE COMPUTER, OBJECT-COMPUTER, MEMORY SIZE, WORDS, CHARAC-TERS, MODULES, COLLATING SEQUENCE, SPECIAL-NAMES,



ON/OFF STATUS, STANDARD-1/ NATIVE, CURRENCY SIGN IS, DECI-MAL-POINT IS COMMA, FILE CON-TROL, SELECT, ASSIGN, TO RAN-DOM, RESERVE, AREAS, ORGANIZA-TION, SEQUENTIAL, RELATIVE, INDEXED, ACCESS IS, DYNAMIC, RECORD KEY, ALTERNATE RECORD KEY, WITH DUPLICATES, FILE STATUS,

I-O CONTROL, SAME AREA FOR, FD, BLOCK CONTAINS, RECORD CON-TAINS, LABEL RECORDS, STANDARD...OMITTED, VALUE OF LABEL, CODE-SET DATA RECORDS, 77-DATA NAMES, FILLER, REDEFI-NES, PICTURE, PIC,

USAGE IS, COMPUTATIONAL/COMP, COMPUTATIONAL-1, COMP-1, COMP-3, COMP-6, DISPLAY, INDEX, SIGN IS...LEADING/TRAILING, SEPA-RATE, OCCURS TIMES, DEPENDING ON, SYNC, LEFT, RIGHT, JUSTIFIED, JUST...RIGHT, BLANK WHEN ZERO, VALUE, RENAMES, THROUGH/THRU, LINKAGE SECTION, DECLARATIVES... SECTION, USE AFTER... EXCEPTION/ERROR, PROCEDURE ON, INPUT, OUTPUT, I-O, EXTEND, END DECLARATIVES, ACCEPT, UNIT, LINE,

POSITION SIZE, PROMPT, UPDATE, ECHO, CONVERT, TAB, ERASE, EOL, EOS, NO BEEP, OFF, REVERSE, BLINK, HIGH/LOW, ON EXCEPTION, FROM, DATE, DAY, TIME, ADD, CORRESPONDING, CORR...TO..., GIVING, ROUNDED, ON SIZE, ERROR, ALTER, TO, PROCEED

TO, CALL, USING, ON OVERFLOW, CANCEL, CLOSE, REEL, NO REWIND, LOCK, COMPUTE, EXIT, PROGRAM, GO TO, DEPENDING ON, IF, NEXT SENTENCE, ELSE, INSPECT, TALLYING, REPLACING, ALL LEADING, FIRST CHARACTER, BEFORE, AFTER INITIAL, MOVE, OPEN, INPUT,

NO LOCK, INTO, KEY, REWRITE, INVALID KEY, FROM, SET...TO, UP BY, DOWN BY, START, KEY IS, EQUAL, GREATER, NOT LESS, STOP, RUN, SUBSTRACT, ADVANCING, PAGE, LINES, LIBRARY, COPY.

Installation considerations

D-NIX Extension Package

079-8711-XX

Ordering information

XX is machine dependent