





Lisa's COBOL is a mainframelevel COBOL compiler that enables you to compile, develop, and run programs on Lisa™ in full ANSI '74 COBOL. COBOL meets and exceeds both the ANSI Standard X3.23 for COBOL and the GSA (General Services Administration) High Level specification. And it contains additional extensions for more efficient programming.

Run programs with mainframe sophistication.

- Full implementation of highlevel COBOL.
- Multi-key ISAM facility, based on an efficient B-tree structure.
- SORT/MERGE capability for faster program development.

Access the largest base of existing applications in the world.

• COBOL is the most commonly used commercial programming language.

- COBOL meets and exceeds the specifications for ANSI Standard X3.23 and GSA High Level.
- COBOL contains several of the most commonly used IBM COBOL extensions.

Extensions allow efficient programming of powerful applications.

 Extended versions of ACCEPT and DISPLAY commands allow input and display positioning at specified points on the Lisa screen.

- Line sequential file handling (text-editor style).
- Run-time specification of external file and program names.

The Editor offers the standard Lisa-style user interface for fast editing and program modification.

• The Editor's Lisa-style userinterface enables you to use the mouse, menus, and other Lisa features, including having more than one file on the screen at once.

• Text may be moved from one file to another simply by copying or cutting and pasting.

 Standard editing functions, such as FIND, REPLACE, INSERT, and UNDO are also available.

Product Highlights

- **1.** Because COBOL is a full implementation of ANSI '74 High Level COBOL, it can be used for a variety of purposes, such as:
 - developing new programs for execution on Lisa (or on any other computer with an ANSI '74 COBOL compiler);
 - · converting existing COBOL programs to run on Lisa;
 - debugging or enhancing existing COBOL programs that have been temporarily downloaded to Lisa.
- 2. COBOL lets you load and run an integrated hierarchy of programs under the control of a single, resident COBOL program. Subprograms are loaded dynamically from disk by the CALL statement. The memory occupied by a subprogram can subsequently be freed by means of a CANCEL statement.

This combination of CALL and CANCEL means that, aside from the availability of space on the disk, there is effectively no limit to the size of applications that can be run.

- **3.** The ANSI-defined communications module provides you with a standard mechanism for passing messages from one program to another.
- **4.** Sophisticated file-handling facilities include multikey ISAM, SORT, and MERGE.
- **5.** COBOL is a complete development environment that includes the COBOL compiler and run-time system, the Editor, and development utilities.
- **6.** COBOL and applications written with COBOL run in the Workshop, which is a complete development and execution environment with facilities similar to the Apple II and Apple /// Pascal environment.

Specifications

Basic capabilities:

- · COBOL meets and exceeds:
 - -ANSI X3.23 1974 COBOL standard.
 - -High Level as specified by the GSA (General Services Administration).

Execution environment:

 Workshop Manager: a complete development and execution environment for independently developed applications. The Workshop facilities are similar to the Apple II and Apple /// Pascal environments.

ANSI language features:

- Implemented at Level 2 (highest level):
- -nucleus.
- -table handling.
- -sequential I/O.
- -relative I/O
- -indexed I/O.
- -interprogram communication.
- -segmentation.
- -library.
- -debug.
- -sort/merge.

ACCEPT and DISPLAY commands:

- Extended to allow specification of where on the screen to display:
- -user input as entered
- -output data as generated.

Compiling:

 COBOL programs are compiled to compact intermediate form which is then interpreted by the run-time system.

Editing

COBOL programs are created using the Editor.

System requirements:

- · COBOL will run on any Lisa.
- COBOL includes:
- -Compiler
- -Run-time system.
- -Editor.
- -Utilities.
- -Reference Manual.
- -User's Manual.
- -Workshop Manager Manual.

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