

EasyCODE 9.3 COBOL

Large parts of all business applications are still written in COBOL. Every day, countless transactions world-wide are processed using these systems. Functional COBOL programs therefore form the backbone of a functioning global economy.

What makes COBOL so special? As one of the oldest procedural languages, COBOL has created programs that in their original version are not seldom older than the developer beforehand. This long maturing period results in applications that leave scarcely a wish unanswered as far as functionality is concerned, but which are becoming increasingly difficult to maintain. In contrast, a new development of these programs involves high technical and business risks without any guarantees. Well thought-out reverse engineering ensures a secure future for the program and economic viability.

EasyCODE for economically viable solutions

EasyCODE for COBOL, just like COBOL itself, is in many aspects unrivalled, and has been proving itself on COBOL projects for more than 15 years. As a world-wide unique development system for COBOL programs that allows the analysis and development of second and third tier applications in structure diagrams, EasyCODE offers its customers a greater potential for savings than can be achieved with successful outsourcing projects.

Structure diagrams consistent with the Nassi-Shneidermann principles have quickly established themselves as an accepted standard for the graphic visualization of procedural programming languages. The advantages of this form of code presentation are best felt when loading an unknown COBOL program. Instead of thousands of lines of apparently incoherent code, with EasyCODE the developer gets a clearly structured program organized into divisions, sections and paragraphs. In the structure diagram, it is obvious at first glance why and to where a "then" branches off, for instance, and what the associated "else" branch triggers. This means that EasyCODE is ideally prepared for the analysis and further development of single files.

```
LISTENELEMENTE-SCHREIBEN [164].
**** LISTENELEMENTE-SCHREIBEN ****
MOVE REISENUMMER OF REISE TO REI
CALL "RDBUCHUNG" [166]
  USING BUCHUNG, FEHLER [166]
IF FEHLER NOT = 0 [167]
THEN
  MOVE FEHLERMELDUNG-4 TO MELD
  MOVE FEHLERMELDUNG-3 TO MELD
ELSE
  MOVE 0 TO EOF, FEHLER,
  PERFORM UNTIL ((EOF NOT = 0) C
                (FEHLER NOT = 0
                (REISENUMMER C
                REISENUMMER OF
  | PERFORM MAECHSTES-ELEME
IF FEHLER = 0 [180]
THEN
  MOVE ERFOLGSMELDUNG-1 TO
ELSE
  MOVE FEHLERMELDUNG-3 TO M
```

The modernization and reusability of existing programs are today focal development requirements. EasyCODE responds to these requirements with a project environment that makes it particularly easy to migrate existing programs to modern modular applications, making a valuable contribution to the protection of your investments.

EasyCODE at a glance

- Project management - for the integration and reorganization of existing projects
- Compiler interface - for easily integrating all the compilers you need
- Version control - programmable interface for integrating your VC system
- Structure diagrams - for analysis, new development and documentation
- Quality assurance - file-related base metrics for static analysis
- Language skills - supports manufacturer-specific extensions in addition to standard COBOL
- Search and replace - available in marked sections or across directories
- MultiView - offers up to 4 editable views of a file for a reliable comparison
- Structure list - visualizes the structure of the file and provides fast access to modules
- Bookmarks - for rapid forward-backward navigation in the structure diagram
- Documentation - consistent, ISO 9001-compliant source code documentation

Working with projects

If you are fortunate enough to be able to begin a new project, realize your ideas in Easy**CODE** Project in a clearly structured form straight from the draft or simply from your thoughts. In doing so, you will enjoy all the freedom of beginning with a file or a rough project structure and then refining it more and more.

Importing projects

You spend up to 90% of your work time with the maintenance and migration of existing programs. This is why Easy**CODE** Project is designed so that you can join ongoing projects at any time. The import function in Easy**CODE** Project assists you with a wide range of options. Having imported the project, you can completely reorganize its structure without physically moving any files. You can also import a project for analysis purposes and simultaneously reorganize it.

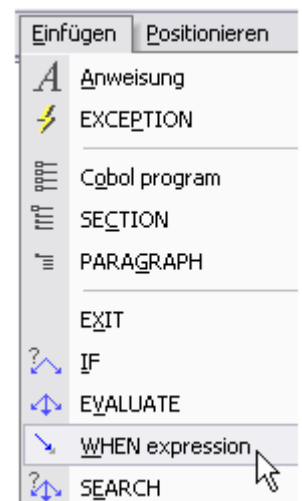
Version control

Easy**CODE** features a freely programmable interface for integrating your version control system. Ready-to-use integrations are available for Microsoft SourceSafe and Subversion.

Editor functionality

With Easy**CODE** COBOL, you can graphically design source files while always working in clearly defined structures and without having to concern yourself with the syntax or formatting. Conversely, Easy**CODE** COBOL loads programs and creates a cleanly laid out structure diagram. Analyzing complex files in the structure diagram using Easy**CODE** often only takes half the time that would be necessary with textual systems. Innovative technologies such as drag & drop, sound search and replace functions, definable generation options, support for modular development, switchable views, a structure list and bookmarks assist you in familiarizing yourself with unknown files.

Designing software in structure diagrams consistent with the Nassi-Shneiderman principles has proven itself in innumerable projects. Easy**CODE** avoids syntax errors by automatically setting parentheses and indents. Insert operations that are not consistent with the definition are prevented.



Documentation

With the structure diagram, you have also created source code documentation that is compliant with ISO 9001. You can print structure diagrams directly, or import single elements into other applications for individual documentation. Easy**CODE** features special comment blocks for documenting directly in the source code. Information that you do not want to appear in the file can be stored in the Properties dialog of projects or files. This is displayed at the mouse pointer.

Quality assurance in metrics

The editor supports your quality assurance by means of a dynamic visualization of the complexity in line with the McCabe concept, and decision and comment density. The required values are configurable and are displayed in the editor as a value and in a three-level color scale (green-yellow-red).

Compiling

Easy**CODE** does not feature a proprietary COBOL compiler, but incorporates an interface for connecting any available compiler. This interface supports multiple compilers and different configurations in a single project. This gives you a homogeneous development environment in which you can go straight to the right position in the

source code when an error is registered. Not only that, but the interface can also be used to perform system actions, for example to transfer a file or for compiling directly on the host.

When and why should I use EasyCODE?

From our point of view, obviously all the time. Keep an eye on your day-to-day work patterns. If you frequently have to resort to pen and paper to visualize correlations in your project or sketch the logic for a query, then it is about time you turned to Easy**CODE**. This is just as true if most of your work involves maintenance and development.

It particularly applies, however, if you have to develop projects under deadline and budget pressure.

Return on investment

The success of our customers is the secret of the success of EASYCODE GmbH. Daily dialog with the most experienced engineers guarantees practice-oriented products and a consistently high investment security over the past 15 years. The costs for Easy**CODE** are usually recouped on the first project.

Short training times and fast learning curves, together with individual care packages, make deciding in favor of Easy**CODE** a simple matter.



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