

Redvers Consulting Ltd **Redvers Cloaking Device**



The Redvers Cloaking Device is a COBOL obfuscator that protects the intellectual property in COBOL source code by removing all comprehensible text, names and labels without changing the logic. This product is a valuable resource for outsourcing, backup, cloud and business continuity projects. It can even be used to bring in-house COBOL products to market.

Main features:

- Runs on any COBOL platform using the standard 80 byte reference format
- Distributed in COBOL source code ("cloaked")
- No special compile/link requirements
- Resulting code is 70% smaller than the original
- Facility to exclude specific lines from "cloaking"
- Encrypts procedure division literals
- Operates on pre-translated and post-translated source code (SQL, CICS etc.)
- Once "cloaked", source cannot be "uncloaked"
- **Free 30 day trial available**

In these times of global outsourcing, cloud processing and industrial espionage, it has never been more important to protect intellectual property from theft and misuse. Whether you're an end user considering the option of outsourcing, a company with COBOL applications that could be sold for profit or a service company writing COBOL applications for clients, the **Redvers Cloaking Device** can be an essential part of securing the future of your business.

The **Redvers Cloaking Device** protects the intellectual property in COBOL source code, while keeping it in source code form. "Cloaked" source code can be recompiled, migrated or outsourced just like any other application code. If you develop commercial software in COBOL, distributing in source code form gives you access to all COBOL platforms.

How it Works

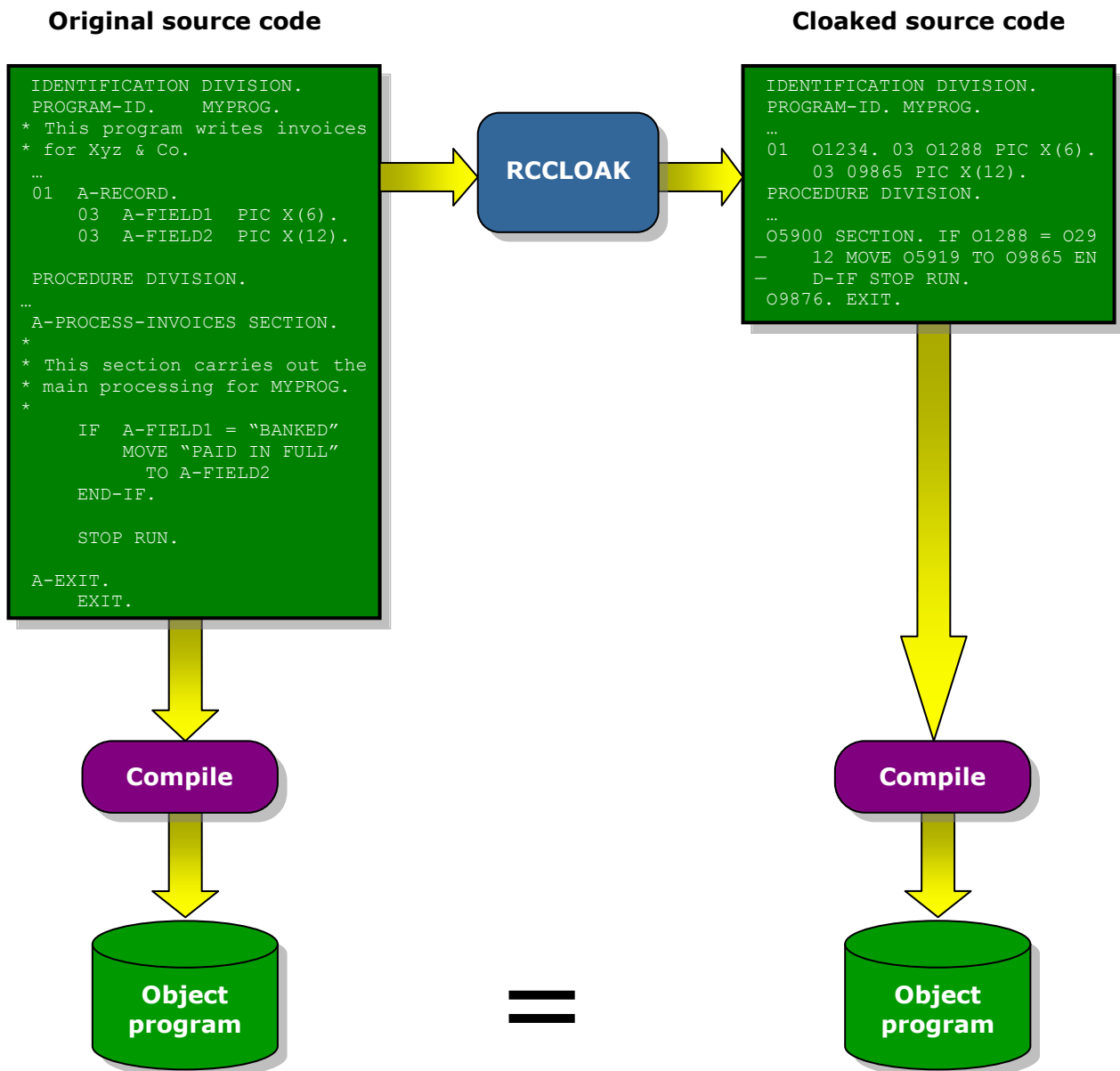
The **Redvers Cloaking Device (RCCLOAK)** is a self-contained batch COBOL program that requires no copybooks, includes or objects. The **RCCLOAK** source code has itself been "cloaked" in order to protect authors and clients from code alterations by unqualified personnel.

In order to "cloak", a program, just pass the original source code to **RCCLOAK** as a data file and it will write a file containing the equivalent "cloaked" COBOL source code.

The "cloaked" source can then be compiled, linked and run in place of the original source.

"Cloaked" programs are currently running all over the world, on **iSeries/AS400, UNIX, HP, CA-Realia, Fujitsu Siemens BS2000, Micro Focus** and **IBM mainframe** platforms.

Once a program has been "cloaked" it is not possible to reverse engineer the source so that meaningful text and data names are restored.



Technical Information

The **Redvers Cloaking Device** 2.4 consists of a standard batch COBOL program (**RCCLOAK**) that compiles in the same way as any other COBOL program. It has one input file (**RCCOBIN**) which is assigned to the target source and one output file (**RCCOBOUT**) that produces the “cloaked”/obfuscated source. Both input and output files are sequential 80 byte fixed length records.

The target source can be any variation of COBOL program, from any machine environment. The only requirements are that the program conforms to the standard 80 byte

reference format and contains the **DATA DIVISION** statement.

It is important to note that the “cloaking” process does not attempt to check the syntax or validity of the input source code. Therefore if compile errors exist before “cloaking”, the same errors will exist afterwards.

Specific lines within the input source code can be preserved from the “cloaking” process if required. This can be useful when source code is outsourced or offered for sale and certain information needs to be passed to the supplier/customer.

A sample section of “cloaked” source code:

```
008390 O3875. PERFORM VARYING O0426 FROM 1 BY 1 UNTIL O0426 > O3742 OR O
008400- 7289 (O0426) = O6698 CONTINUE END-PERFORM IF O0426 > O3742 AN
008410- D O3742 < O9099 MOVE O0426 TO O3742 MOVE O6698 TO O7289 (O374
008420- 2) SUBTRACT 1 FROM O2032 GIVING O2591 MOVE O6698 (O2591:2) TO
008430 O0088 MOVE O3116 TO O2591 ADD O2591 TO O8588 DIVIDE O8588 BY
008440 9941 GIVING O6379 REMAINDER O2574 (O3742) MOVE FLG4 TO O2409
008450 (O3742) MOVE ZERO TO O0426 PERFORM VARYING O2574 (O3742) FROM
008460 O2574 (O3742) BY 1 UNTIL O0426 = O3742 PERFORM VARYING O0426
008470 FROM 1 BY 1 UNTIL O0426 > O8750 OR O2813 (O0426) = O2574 (O37
008480- 42) CONTINUE END-PERFORM IF O0426 > O8750 PERFORM VARYING O04
008490- 26 FROM 1 BY 1 UNTIL O0426 = O3742 OR O2574 (O0426) = O2574 (
008500- O3742) CONTINUE END-PERFORM IF O0426 = O3742 MOVE O2574 (O042
008510- 6) TO O2052 IF O2689 MOVE ZERO TO O0426 END-IF END-IF ELSE MO
008520- VE ZERO TO O0426 END-IF END-PERFORM IF O2574 (O0426) > ZERO S
008530- UBTRACT 1 FROM O2574 (O0426) ELSE MOVE 9999 TO O2574 (O0426)
008540 END-IF END-IF.
```

The Product Package

A perpetual license for the **Redvers Cloaking Device** is available from Redvers Consulting.

All licenses include:

- Product source code (“cloaked”)
- User Guide
- Corporate level software license
- Two year warranty
- Product upgrades and support via email*

* Free for the first two years followed by a minimal annual fee.

Additional options:

- 24 x 7 telephone hotline support
- Software escrow agreement with Software Escrow Solutions

Software and documents are shipped in the form of email attachments unless otherwise requested. Installation is performed by copying the source code text into your COBOL source code library and compiling.

Full pricing details can be found at:
http://www.redversconsulting.com/cloaking_device_pricing.php

About Redvers Consulting

Redvers Consulting have been providing top quality products and services for COBOL applications since 1988. Our clients are primarily large financial institutions in Europe and North America, although we also have customers in many other business and geographical areas.

Our ability to deliver software in COBOL source code form, gives customers reliable, efficient and perfectly integrated solutions to business needs. Source code distribution also means our software will run on all hardware platforms and operating systems: *EBCDIC, ASCII, big endian or little endian*.

We are business partners with **IBM, HP** and **Fujitsu Siemens**, and our development team are members of the **Professional Contractors Group**. In 2009 we won the Thames Gateway **Best use of Technology Award**.

Our client list includes:

Agora (FR)
ANZ (AUS)
Barclays Life Assurance (UK)
Canada Life Assurance (UK)
Deutsche Bank (USA)
Deutsche Rentenversicherung Bund (DE)
FirstBank (USA)
Fiserv (USA)
GMAC Insurance (USA)
Hanesbrands (USA)
John Deere (USA)
LBS / Finanz Informatik (DE)
J P Morgan (USA)
Oppenheimer (USA)
Pacific Gas (USA)
Network Rail (UK)
R+V Allgemeine Versicherung (DE)
Sasktel (CAN)
SEB (DE)
Standard Life Assurance (UK)
Suncorp (AUS)
SunGard / FIS (USA)
WorkSafeBC (CAN)
Zurich Insurance (UK & SUI)

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