



**The Redvers COBOL XML Interface gives COBOL applications fast efficient access to the world of XML and web services. This off-the-shelf software is written in pure COBOL and simply requires the coding of a COBOL record layout and CALL statement to generate or parse any well-formed XML document.**

**Main features:**

- Runs on all COBOL platforms
- Distributed in COBOL source code ("cloaked")
- Generates and parses multiple dimension arrays (nested OCCURS)
- Easy maintenance
- Fast, efficient, professional and fully scalable
- No training required for COBOL programmers
- Supports XML attributes, namespaces, SOAP, entities, CDATA, duplicate tag names and mixed content elements
- Free schema to copybook build tool
- Runs in batch or on-line
- **Free 30 day trial available**

The **Redvers COBOL XML Interface** operates at record level, intelligently building all necessary XML element structures when generating and correctly interpreting XML structures when parsing. This approach replaces complex element level application logic with a single **CALL** statement that passes the next logical record to/from the application.

Our interface is currently used by customers all over the world, running on **iSeries/AS400, UNIX, HP, CA-Realia, Fujitsu Siemens BS2000, Micro Focus** and **IBM mainframe** platforms.

It is frequently used in Service Oriented Architecture (SOA) projects and to integrate XML messages on IBM's MQ Series with core COBOL applications. It's also suitable for generating and parsing SWIFTNet messages and Single Euro Payments Area (SEPA) applications.

## How it Works

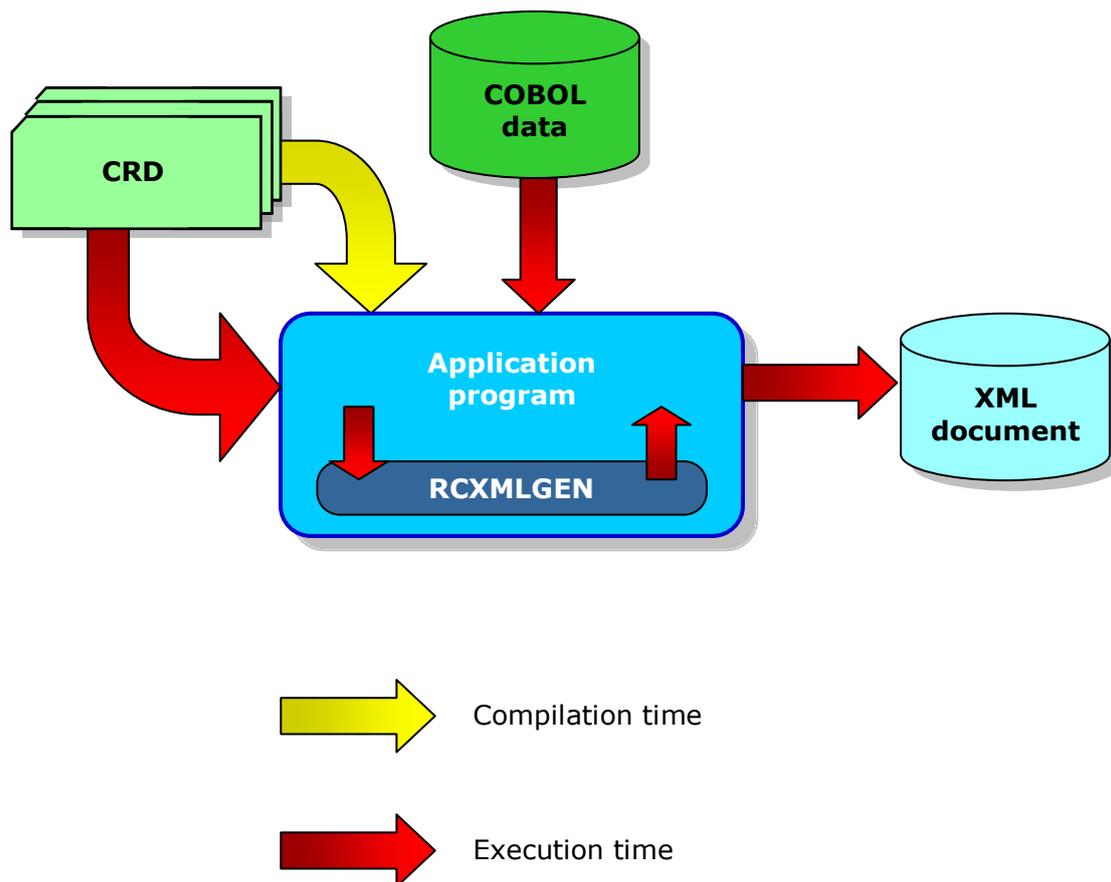
Before a COBOL application generates or parses XML, a **COBOL Record Definition (CRD)** is coded, consisting of a working storage field definition for each XML element (the schema to copybook build tool can be used for this). The CRD is then placed in the standard copybook library and a **COPY** or **INCLUDE** statement is added to the application code.

The CRD source code is also stored in the calling application so it can be passed to the interface routines in the **CALL**. This can either be done by hard-coding the source into working storage or by reading the source from the copybook library at run time.

To **generate** XML, the COBOL application populates the CRD and passes it to the generation subroutine (**RCXMLGEN**) with the CRD source in a **CALL** statement. **RCXMLGEN** then converts the COBOL data to XML elements & attributes and returns the XML document to the application.

To **parse** XML, the application passes the XML and CRD source to the parser subroutine (**RCXMLPAR**) which returns the COBOL data in the CRD fields.

The generation process is illustrated below:



*Parsing is achieved in a similar way to the above, except the application passes the XML document to **RCXMLPAR** which returns the COBOL data in the CRD.*

## Technical Information

The **Redvers COBOL XML Interface 3.1** programs are sold in COBOL source code form and are installed by copying to the site source code library and running the standard COBOL compiler. Compilation at client sites enables installation on multiple platforms and it ensures complete compatibility with all other COBOL applications on the platform.

Using source code also allows customers to make changes to certain values that would otherwise remain fixed. These values are known as **User Maintained Variables (UMV's)** and they can be tuned to provide additional efficiency and/or a more formatted XML output. Full details on all UMV's can be found in the product user guides.

In order to protect both clients and authors from unauthorized code changes, the subroutine source code has been "cloaked" using the **Redvers Cloaking Device**. This process makes no logical difference to the code but renders it unintelligible to humans.

The **COBOL Record Definition (CRD)** can be coded to generate or parse any XML tag names, attributes, namespaces, SOAP and mixed content elements. Very large documents are generated/parsed using multiple calls to the interface so that machine storage is kept to a minimum.

Generated XML documents conform to the World Wide Web Consortium (W3C) **Extensible Mark-up Language (XML) 1.0** definition at: <http://www.w3.org/TR/xml/>.

Parsed XML documents are checked for syntax errors. In the event of an error, a message is returned, identifying the erroneous character position within the input document. No schema or DTD validation is performed.

XML generation rate is **9.9 megabytes per second**; parsing rate is **7.4 megabytes per second**. All benchmark timings are based on an IBM zSeries mainframe running z/OS 1.10. Maximum document size is **99 megabytes**.

## The Product Package

A perpetual license for the **Redvers COBOL XML Interface** can be provided for a one-off fee. Alternatively, the software can be leased on an annual basis for 20% of the perpetual license cost (minimum two years).

### All licenses include:

- Program source code ("cloaked")
- Sample COBOL calling programs
- User Guides
- Corporate level software license
- Money back guarantee
- 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 the NCC Group

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 running your standard site compiler.

We also provide a consultancy service for the building of client application programs that call the **Redvers COBOL XML Interface**. Charges for this service are based on our standard hourly consultancy rate.

Full pricing details can be found at: [http://www.redversconsulting.com/cobol\\_xml\\_pricing.php](http://www.redversconsulting.com/cobol_xml_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)

**Contact:** <https://www.redversconsulting.com/contact.php>

### Development Office:

Redvers Consulting Ltd  
44 Broadway,  
London E15 1XH,  
UK

**Tel:** +44 (0)203 130 0773

**Fax:** +44 (0)700 603 8655

### Accounts Office:

Redvers Consulting Ltd  
1st Floor, 48 Dangan Rd,  
London E11 2RF,  
UK

**Tel:** +44 (0)870 922 0633

**Fax:** +44 (0)707 505 5472

### German Office:

Redvers Consulting Ltd  
Postfach 30 03 26,  
50773 Köln,  
Deutschland

**Tel:** +49 (0)221 1704 9000

**Fax:** +49 (0)221 271 1016