Redvers Consulting Ltd

Redvers COBOL XML Interface

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.

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

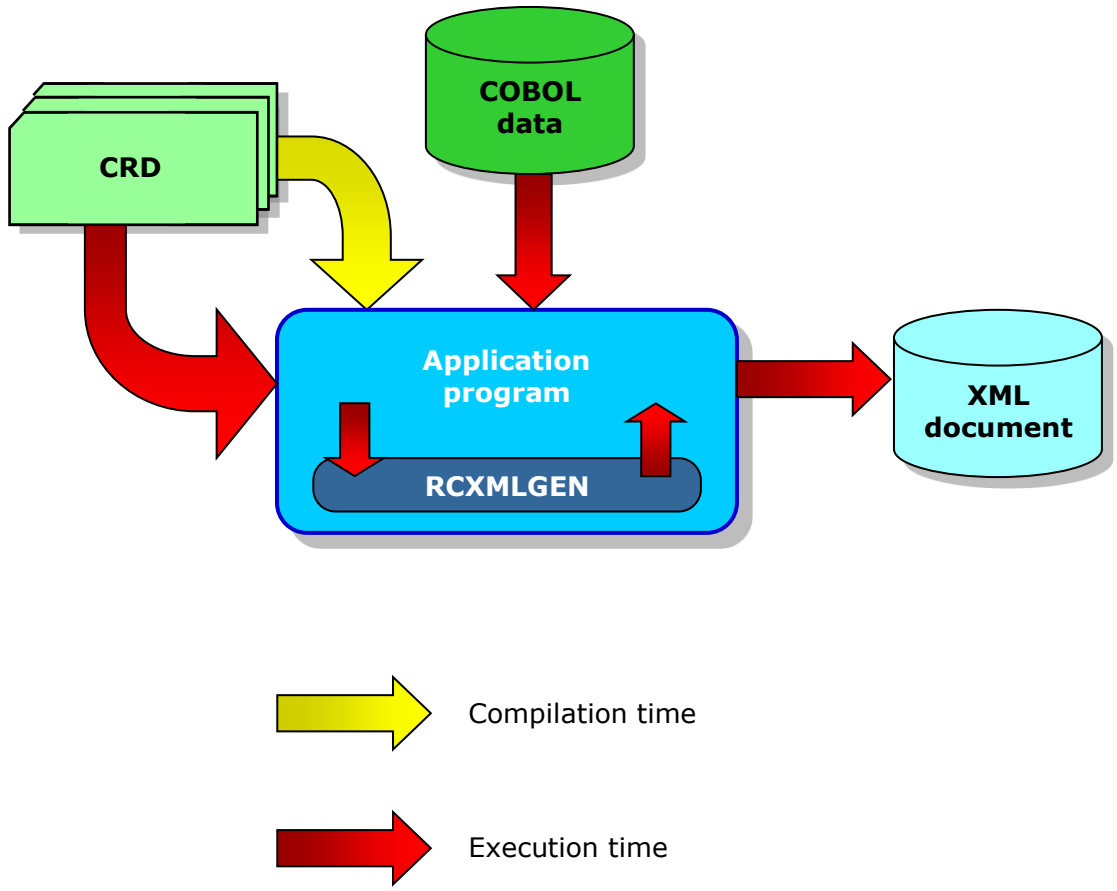
Before a COBOL application generates or parses XML, a **COBOL Record Definition (CRD)** is coded, consisting of a working storage field definition for each XML element (the schema to copybook build tool can be used for this). The CRD is then placed in the standard copybook library and a `COPY` or `INCLUDE`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

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 on-line document size is **99 megabytes**; there is no maximum document size for batch applications.

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 year, 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.

Full pricing details can be found at: https://www.redversconsulting.com/cobol_xml_pricing.php

About Redvers Consulting

Redvers Consulting provide niche software products for the integration, modernization and security of COBOL applications. 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*.

Redvers Consulting have received many business awards over the years, including winning the **Best use of Technology** category in the Thames Gateway Business Awards. We are also business partners with **IBM**, **Micro Focus** and **Fujitsu**.

Our client list includes:

Agora (FR)
ANZ (AUS)
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)
Resideo (USA)
R+V Allgemeine Versicherung (DE)
Sasktel (CAN)
SEB (DE)
Standard Life Assurance (UK)
Suncorp (AUS)
SunGard / FIS (USA)
WorkSafeBC (CAN)
Zurich Insurance (UK & CHE)

Contact: https://www.redversconsulting.com/contact.php

Development Office:

Redvers Consulting Ltd
16-18 Woodford Road,
London E7 0HA,
UK

Email: development@redversconsulting.com

Accounts Office:

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

Email: accounts@redversconsulting.com

Copyright 2024 Redvers Consulting Ltd.