isCOBOL™ EIS

COBOL features for Web Applications

As a result of Software as a Service (SaaS) and other delivery models becoming mainstream, COBOL assets need to continue to evolve to remain relevant. With isCOBOL EIS functionality, your business can deploy rich Internet applications written in COBOL. isCOBOL EIS provides techniques for web screen section, REST/SOAP Web Service, JavaScript Object Notation (JSON), eXtensive Markup Languge (XML), Java Servlet and HTTP protocol management.

Highlights

- Native support for REST and SOAP Web Services
- Integration with standard J2EE application server
- COBOL natural syntax for XML, JSON, HTML data management
- Real application modernization based on HTML5/CSS3 and Javascript
- Improve time to market by reusing existing business process
- Requires no knowledge of JavaScript, HTML or other Web languages to implement with IES WD2 option
- Provides innovative environment for Software as a Service (SaaS) and other Web-based delivery offerings

Umbrella of tools and features for Web Applications

The isCOBOL Enterprise Information System (EIS) delivers to COBOL application developers, the ability to build the next generation of commercial applications and services. It is a methodology to take advantage of the worldwide web and its technology, it uses open standards such as:

- Extensible Markup Language (XML)
- JavaScript Object Notation (JSON)
- HyperText Transfer Protocol (HTTP)
- Simple Object Access protocol (SOAP)
- Representational state transfer (REST)

to provide a state-of-the-art technology to develop modern applications based on the architecture, function and appearance of HTML5 and CSS3.

isCOBOL EIS targets key platforms like Windows, UNIX and Linux, leverages Open Source products like Apache Tomcat, JBoss Application Server from Red Hat and GlassFish from Oracle.

Web Service Option

It is possible to expose legacy business functions to any programming language taking advantage of Web Service Option. Developers can easily implement COBOL REST producer™ to process requests and provide data. COBOL programs will be executed like a REST Web Service. The communication will be based on HTTP protocol using JSON stream. In case a COBOL program needs to consume an existing REST Web Service, developers can implement COBOL REST Consumer™ (client-side), to invoke REST Web Services.

If the existing Web Services are based on a SOAP protocol, isCOBOL EIS developers can generate a COBOL SOAP Consumer™ to allow run functionality of a Web Service based on a SOAP protocol.

All complexity of SOAP messages, XML and JSON interpretation is done in a working storage structure to provide a natural and intuitive way for COBOL developers. It also provides a utility to convert SOAP Web Service Definition Language (WSDL) to that working storage structure.

COBOL Servlet™ Option

isCOBOL EIS simplifies the Java servlet development by enhancing COBOL syntax. A software developer may use a COBOL Servlet™ to add dynamic content to a web server using the COBOL platform. The generated content is commonly HTML, but may be other data of a content such as XML and JSON. COBOL Servlet™ can maintain state in session variables across many server transactions by using HTTP cookies, or URL rewriting. This technology could also be used to replace legacy COBOL CGI programs.

COBOL Servlet™ technology is superior to CGI but uses the same HTML code. So you can switch from CGI programs to servlets on the back-end without having to change the programming on the front-end. Also COBOL Servlet™ has other advantages over COBOL CGI programs:

- Is persistent. They are loaded only once by the Web server and can maintain services such as database connections between requests.
- Is fast. They need to be loaded only once by the Web server. They handle concurrent requests on multiple threads rather than in multiple processes.
- Is platform and Web server independent.
- Can be used with a variety of client-side and server-side Web programming techniques and languages.

Web Direct 2.0 Option

Leveraging AJAX technology, isCOBOL EIS WD2 (aka isCOBOL Web Direct 2.0) enables the deployment of fully-interactive COBOL programs to the Web without changing basic application structure. isCOBOL IES WD2 does not need to install any ActiveX control or Java to run, nothing to be downloaded, no waiting, and no client-side deployment; eliminating the need to install, maintain, and update applications on the desktop. With the costs of deploying and managing PCs estimated to be thousands of dollars per year, running applications on a back end server and presenting users with a Web interface can be significantly less expensive and easier to deploy and manage than traditional fat client implementations. By maintaining application state and using current isCOBOL GUI screen section techniques, procedure division and flow, EIS Web Direct 2.0 option provides a secure, flexible option for the ongoing evolution of COBOL applications.

To the end user, interacting with isCOBOL EIS Web Direct 2.0 applications feels more like using a standalone desktop application than a typical Web application.

A complete range of COBOL maintenance and modernization solutions

isCOBOL EIS is offered with isCOBOL Evolve from Veryant. isCOBOL Evolve provides a complete environment for COBOL development, deployment, maintenance and modernization. In addition to delivering COBOL applications through an innovative, zero-client deployment model, traditional local desktop deployment and thin client models are also available with isCOBOL technology.

Visit veryant.com for additional information.

Veryant. 4455 Murphy Canyon Road, Suite 209; San Diego, CA 92123