



Web UI Solution

Leveraging
Oracle Tuxedo Application Runtime for CICS

You have decided to rehost your mainframe CICS application using Oracle Tuxedo Application Runtime (ART) for CICS. *Now give your users the option to use a Web Interface!*

Break free of client software license requirements!
Use only a web browser to access your online application.

Metalogic Systems brings to you the **Web UI Solution** leveraging Oracle Tuxedo ART for CICS.

- ✓ An all- Java solution for your rehosted application's user interface requirements
- ✓ No software installation on clients
- ✓ Make your application available through intranet or internet
- ✓ Minimal or no user training required – they can navigate using the keyboard (or the mouse, if they so prefer!)
- ✓ Seamless integration through the Web UI Integration Framework included in Oracle Tuxedo ART Runtime for CICS and Batch 12c Release 1 (12.1.1)
- ✓ You get a modern web application from your BMS Map definitions
- ✓ Simple web application with simple code offering all required UI functionality
- ✓ A scalable solution for your enterprise that can be your first big step towards further modernization



The Web UI Solution

With the latest inclusion of the Web UI Framework in Oracle Tuxedo ART for CICS, Metalogic's solution for migrating BMS Map screens on CICS to Java/JSP is now integrated with Oracle Tuxedo ART for CICS. Metalogic's runtime for the Web UI runs natively with Oracle Tuxedo ART for CICS and offers a Web User interface for rehosted applications.

The solution includes a Tuxedo runtime component from Metalogic that communicates with the Web UI Integration Framework within Oracle Tuxedo ART for CICS via Jolt. A Web Application runtime from Metalogic makes the communication with the Tuxedo runtime component transparent and manages the exchange of data efficiently.

Implementation of this solution requires a web server. Since Jolt is used for communication, the solution is web server independent. However, the solution has been tested using Oracle WebLogic as the web server.

Conversion to Java/JSP

bms2web – the workbench tool

The tool converts BMS Maps defined in the mapset files to JSP pages. It also generates all components that are required to get a fully functional web application up and running in minimum possible time.

Additionally, bms2web generates HTML page representations of the BMS Maps complete with an index.html to allow for a quick view of the resulted screens in the form of a wireframe.

bms2web platform support

Presently, bms2web is available on Oracle Enterprise Linux (64-bit) on x86-64, Red Hat Enterprise Linux (64-bit) on x86-64 and Microsoft Windows XP (SP3) (32-bit).

bms2web DBCS support

The bms2web tool supports double bytes in BMS Map definitions and recognizes SOSI, GINIT, XINIT clauses to correctly identify and assign constant values in generated JSP pages and Java classes.

Web Runtime Components

Standard model and framework for open systems

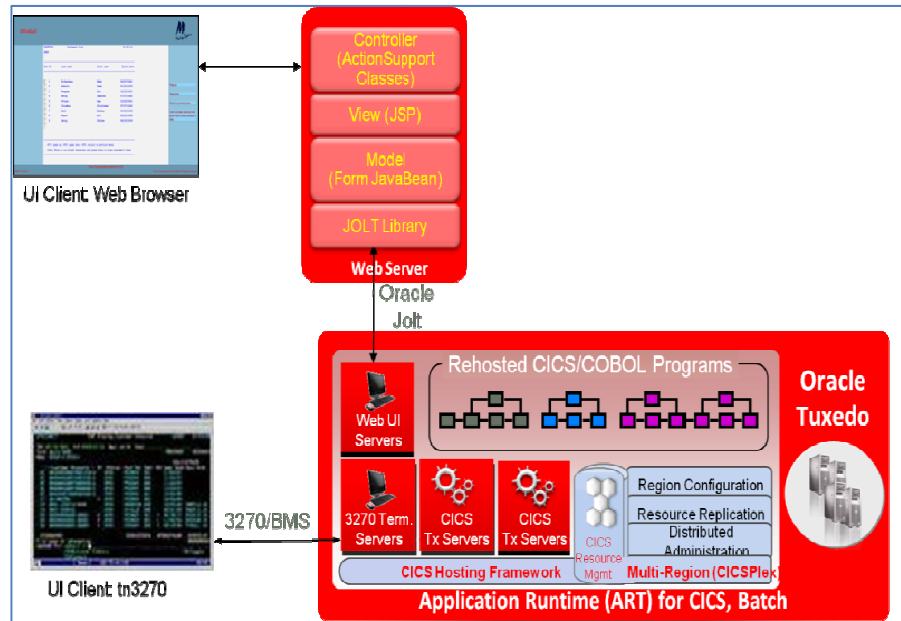
The web application as part of this integration solution has been designed following standard patterns and framework. Highlights of the design concept and considerations for the web application are as below:

- Struts2 compliant standard MVC model
- Appearance guided by cascading style sheet
- JSP pages contain no logic but UI objects only
- Java exchanges application data with Tuxedo in XML format
- XML parsing and creation transparent to the application
- Interaction with Tuxedo transparent to the application
- Java classes distributed within well-defined packages
- 3270 feel preserved:
 - o Overwriting as data are entered by users
 - o Order of navigation by tab key preserved
 - o Automatically moving to next field once current field is filled
 - o Displaying numeric data in originally specified format
 - o Up and Down arrow keys to navigate through fields
 - o Function key (PF Key) behavior retained

Web UI - Integrated Runtime Architecture

The web application generated and implemented by this solution integrates with Oracle Tuxedo Runtime for CICS such that the character user interface provided by the product can co-exist with the Web interface.

Below is a representation of a typical runtime environment –



Web UI platform support The Web UI Integration solution from Metalogic is supported on Oracle Enterprise Linux (64-bit) on x86-64 and Red Hat Enterprise Linux (64-bit) on x86-64. The software requirements and dependencies are:

- Oracle WebLogic Server
- Oracle JOLT
- Java 6.0
- Struts2 (2.2.1.1) Libraries
- Apache Commons Logging Libraries
- Log4j Library

Oracle Tuxedo, Oracle Tuxedo Application Runtime for CICS and Batch, Oracle WebLogic and Oracle JOLT are products from Oracle. Details about these products can be found at their website <http://www.oracle.com>.

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