CODETURN FOR EGL TO JAVA MIGRATIONS

AT A GLANCE

Many of today's mainframe applications that were developed in EGL are still mission-critical and continue to deliver significant benefits to the organizations that use them. Nevertheless, the Total Cost of Ownership (TCO), skill shortage, and end of support associated with these applications are forcing many organizations to look for alternatives. Astadia's CodeTurn for EGL migrations liberates these valuable and reliable business systems from their dependency upon non-strategic, legacy technologies and brings them to a state-of-the-art technology stack.

PRODUCT HIGHLIGHTS

Astadia will take any application developed in EGL and automatically transform it to a functionally identical one, now ready to run on any platform supporting the JVM. Since both the transformation and the testing is fully automated, the outcome of the project is fully predictable, in terms of risks, costs, and duration.

THREE STRONG PROMISES

At Astadia, all transformations ensure three types of equivalence:

Functional equivalence
The migrated application's behavior is identical to that of the original one.

Performance equivalence
The migrated application will perform at least as well as the original one.

Maintenance equivalence
The maintenance of the migrated application will be comparable in effort to the original application.

Why transform your EGL to Java?

There are many good reasons to make the move from EGL to Java. These are typically the major concerns for businesses:

- High (and rising) maintenance and runtime fees for the EGL / Mainframe products;
- Shrinking availability of EGL developers and lack of interest in EGL from young developers;
- EGL is no longer officially supported by IBM. Other commercial support options are limited.

Java offers answers to all these concerns:

- Support fees are negligible or even non-existing;
- It is one of the most widely-used programming languages today and actively being developed;
- Its interoperability and portability are unsurpassed when compared to other technologies;
- Java is easily maintainable.

Next to that, moving to Java also means:

- Enabling the use of a state-of-the-art IDE, with extensive debugging, refactoring, profiling and (unit)testing support;
- Enabling the use of thousands of third-party libraries, covering almost all imaginable computing needs.

EGL TO JAVA MIGRATIONS

Astadia delivers end-to-end EGL migration solutions, in collaboration with selected partners, including support for:

- Mainframe EGL with TextUI/3270 User Interface;
- WebSphere-based EGL with web-based User Interface;
- Mixed Mainframe/WebSphere environments;
- Mainframe EGL environments combined with native COBOL or other languages;
- Migration of the batch environment (JCL) to Bash;
- Data migration, e.g. VSAM to relational;
- Automated testing of the migrated application with Astadia' TestMatch tool;
- Solutions for integration topics such as printing, security etc.;
- After go-live, the source environment (Mainframe and/or Websphere) can be decommissioned.

PHASES OF EGL MIGRATIONS

The migration of EGL happens in two stages:

- ➤ All EGL User Interface technologies (3270, JSP, JSF) are converted to JavaScript. JSP and JSF are "split" into a JavaScript front-end component and one or more Service back-end components that may be invoked from the JavaScript.

- ➤ All EGL programming logic (Programs, Services, Libraries…) are converted to native Java with Astadia' DataTurn tool.

All involved conversions are fully automated, guaranteeing code quality, avoiding risks, and offering full predictability by 100% automation. Certain aspects of JSP/JSF conversion may require manual adaptations. This work is inventoried during the pre-migration assessment, and any related cost will be included in the final project offer.

Automated conversions and manual adaptations can seamlessly integrate thanks to advanced API design and an automated workflow.

AUTOMATED TESTING

The converted application is tested with Astadia's TestMatch and DataMatch. Using these tools significantly reduces the time and effort needed to complete the project:

- TestMatch avoids the requirement to manually create test scenarios for the complete application
- TestMatch limits the application end-user involvement in the project to acceptance testing.
- DataMatch validates the content of databases, greatly reducing the effort needed to perform batch application testing.

REFERENCES

Astadia has a 100% success rate, having completed numerous conversion and modernization projects around the globe.

Each of these projects has been delivered on time, within budget and to the complete satisfaction of the customer.

Visit our Case Studies website section and contact us at info@astadia.com for more information.