Migration and Reengineering of applications to EGL

>> The Problem

Transferring existing apps to EGL can lead to a range of advantages:

- Productivity improvement
- Platform independence
- Improvement in agility through modularization
- Transition to model-based development
- Creation of service-oriented architecture (SOA)
- Consolidation of different languages
- Development of a modern software development process
- Web integration
- Development of junior staff for maintenance of portfolio applications
- Motivation of development team

Transferring large-scale portfolio applications to a new language/technology is not, however, a trivial matter. A new development is usually not economically justifiable and cannot be realized with existing resources within a reasonable amount of time.

>> The Solution

As transition experts, PKS has developed a range of tools with which portfolio applications can be transformed to EGL in a highly automated fashion using rule-based software tools. In addition, PKS provides tools that can help easily integrate portfolio apps with EGL.

>> Suitable Tools / Services

<table>
<thead>
<tr>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching</td>
</tr>
<tr>
<td>EGL Transition Assessment</td>
</tr>
<tr>
<td>Migration Tools 400 EGL</td>
</tr>
<tr>
<td>Reengineering Tools 400 EGL</td>
</tr>
<tr>
<td>SmartEGL</td>
</tr>
<tr>
<td>SmartDCI</td>
</tr>
</tbody>
</table>
Migration Tools 400 EGL (OEM product of IBM: RMEi D04FGGL)

The Migration Tools 400 EGL transform existing RPG and Cobol applications into IBM’s Enterprise Generation Language (EGL). EGL is a highly efficient language for developing modern, platform-independent business applications. EGL is embedded in Eclipse, is compatible with WDSC and generates platform-independent Java code as well as high performance native code for System i.

Features and Benefits
- Applications can be further developed in a modern business language
- Existing application functionality can be fully adopted
- Saves 70-90% of the costs in comparison to reprogramming
- The future of RPG apps can be secured over a long period of time
- Simple entry into the SOA world
- Application is platform-independent yet high performance for System i

Reengineering Tools 400 EGL

The Reengineering Tools 400 EGL break down existing RPG and Cobol applications into their components and extract business rules, data models, etc. in order to reconstruct them in a new and highly agile application architecture based on IBM’s Enterprise Generation Language (EGL).

Features and Benefits
- Applications can be further developed in a modern business language with a very maintenance-friendly and agile SOA or MVC architecture
- Most existing application functionality can be adopted
- Saves 50-80% of the costs in comparison to reprogramming
- The future of RPG apps can be secured over a long period of time
- Simple entry into the SOA world
- Application is platform-independent yet high performance for System i

SmartDCI®

With SmartDCI®, Adabas C applications can be quickly and securely migrated to relational database systems without having to make any modifications to the their source code.

Features and Benefits
- Unmodified Adabas applications can be run in relational database systems.
- Support of ISNs, multiple fields, period groups, descriptors, super descriptors, etc.
- No modification of source code; unmodified applications continue to run.
- Independence of the programming language used
- Little testing effort needed for migration
- Available for mainframe and open systems platforms, for Oracle and DB/2
- Maximum investment protection thanks to unchanged operation of existing applications
- Consolidation of databases in entire company
- Integration of applications through the mutual use of data pool in relational database
- Future orientation/sustainability and security thanks to open industry standards (Oracle, DB/2)
- Independent of Software AG’s licensing and maintenance policies
With SmartEGL, full-fledged and complex Natural applications can be securely and quickly migrated to EGL (Enterprise Generation Language) through a rule-based converter. In turn, the migrated applications can be made available as Java/J2EE or Cobol apps and executed in a variety of environments without having to make any further changes.

Features and Benefits

- Natural applications are fully and automatically migrated to EGL
- Automatic encapsulation of access layer, business process logic and user interface
- High degree of serviceability of EGL code
- EGL code very similar to Natural code
- Access statements (READ, FIND, STORE etc.) and corresponding SQL in service libraries similar to Natural
- Simple to learn; special „EGL for Natural developers“ training available
- Full support for a wide variety of services, databases, user interfaces, transaction servers and operating systems
- The freedom to decide in which environments the applications and services of (former) legacy apps should be made available, without having to change the app’s source code
- Technical complexity of the target systems completely masked out from developer
- High degree of productivity
- No paradigm break from procedural to object-oriented development thanks to 4GL concepts
- Fast and simplified SOA support without knowledge of WSDL or SOAP etc.
- Accelerated modernization and further development of legacy applications
- Sophisticated, stable development environment based on Eclipse
- Large selection of tools and assistants for fast, efficient application development
- With the Adabas C plug-in for EGL, Adabas C can be directly accessed using EGL without having to do any direct programming

PKS Software GmbH
Georgstr. 15
88214 Ravensburg
Germany
Tel. +49 751 561 40-0
Fax +49 751 561 40-500
sales@pks.de
www.pks.com