iQgen – Facts and Data Sheet

GENERATOR

Built from knowledge gained in large-scale, mission-critical development efforts

While doing consulting for major companies, innoQ has built and used several different software generators. iQgen is the tool we would have liked to have: Focusing on what is really needed, easy to integrate into a standards-based development process, and, most importantly, not taking away decisions from the project's staff by assuming to know the right architecture that works everywhere.

iQgen Features:

- Able to generate every textual software artefact, including, but not limited to, Java, C++, C and C# source code, XML files (e.g. deployment descriptors), configuration information, make or Ant build scripts, test drivers and test data
- XMI import interface to support major CASE tools like Rational Rose, MID Innovator, Microtool ObjectiF, Together, ObjectDomain,and ArgoUML
- JSP template syntax with full support for JSP1.1, including tag libraries to build custom tags for use during template development
- Support for model/UML™ profile validation
- On-the-fly compilation of JSPs to Java byte code for increased performance
- Command line, Jakarta Ant, GUI interface and Eclipse Plug-In

Implementation Details:

- Written in 100% pure Java
- Available on Windows NT/2000/XP, Linux, Mac OS X
- Supports XMI 1.0 and 1.1
- Small footprint (requires just 6 MB disk space)

Please visit http://www.innoq.com/iqgen

Contact information:

For more information please contact:

info@innoq.com

innoQ Deutschland GmbH
Halskestraße 17
D-40880 Ratingen
Germany
Phone: +49 (0) 21 02 – 77 162 -100

innoQ Schweiz GmbH
Gewerbestrasse 11
CH-6330 Cham
Switzerland
Phone: +41 (0) 41 - 743 01 11

iQgen – The Model Driven Software Generator

GENERATOR

Turn Architectural Rules Into Templates

iQgen allows organizations that develop enterprise applications to focus on the essential: the business domain model and the implementation of functional requirements. Architectural rules are specified as templates. iQgen applies the templates to a model and thus transforms it into implementation artifacts, preserving existing information.

Support for OMG's Model Driven Architecture

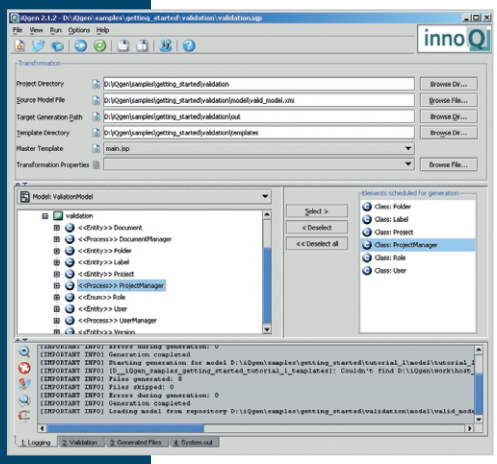
iQgen supports development according to OMG's Model Driven Architecture (MDA®) initiative. You can design your Platform Independent Model (PIM) using standard CASE tools and use iQgen to transform it into a Platform Specific Model (PSM) implementation.

By factoring out architectural rules into templates, changes in technology or infrastructure components can easily be incorporated – and in most cases, this can be done without touching existing models or implementation code.

Automate Repetitive Tasks and Increase Conformance to Architectural Guidelines

Usually, a system's technical software architecture is defined in prose, leading to huge documents that need to be read, understood and applied by every developer. Examples include how to persist objects, how to implement relations, how to manage life cycle, etc. This leads to a huge amount of effort required to implement functionality not only correct, but also architecture conformant. iQgen can automate most of the tasks and allows the developer to focus on the implementation of functional requirements.

iQgen is not exclusively a manager's or analyst's tool. Because the templates are specified using Java ServerPages (JSP) syntax, they can be edited along-side with Java and other implementation code, enabling developers to use meta-programming for repetitive tasks.



Key Features:

- Decouples business model, functional implementation and software architecture
- Supports development according to OMG's MDA®
- Use of standards like XMI and JSP ensures compatibility and reduces training effort
- Template-based approach allows generation of software artifacts for technologies like CORBA, J2EE and .NET
- Integrates seamlessly with the Eclipse Development Platform

Please visit http://www.innoq.com/iqgen