Jaime

The more emotional instants

Java Batch Program Generation Tool

Automatically generates a high-performance and high-quality Java batch program.
New style for Java batch program development to reduce development man-hours remarkably.

You can optimize your development work on Java batch program with this tool only!
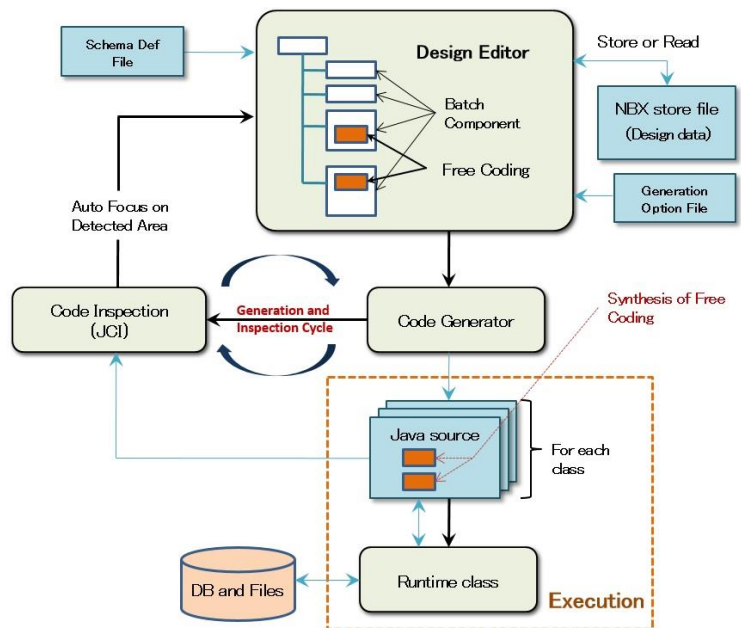
- In recent years, the cases to use Java language are increasing to develop batch programs, as hardware performance has been improving enough to use the language. Programmers are always required to develop higher performance and quality programs, with less development period of time and less cost at the same time. This situation is unchanged even Java is used, and developers have been bothered how to respond to this demand.

- Jaime (Java Automatic and IncreMental batch Environment), which is an automatic Java batch program generation tool, is the solution to overcome the situation. By using code generation functions of Jaime, high performance and quality Java batch programs can be developed effectively within shorter period of development time.

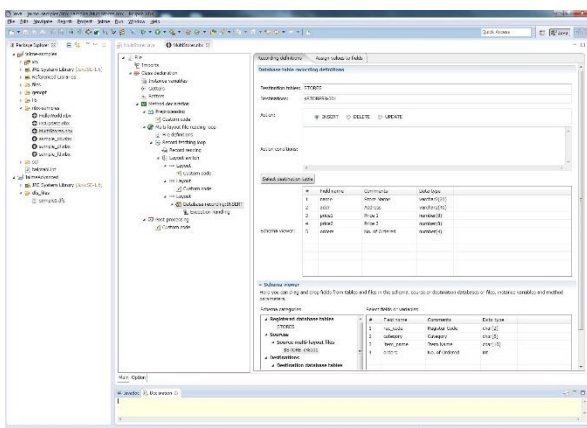## Features 1   Flexibly applies to various kinds of batch process

Several typical process units, such as input/add/update for DB tables and cursor fetch, are provided with their icons to build process flows and output logics on the screen. Customizations for detail actions are also capable by setting parameters. Also, free coding is allowed flexibly to add or update both Java codes and SQL sentences, which makes sure to develop Java batch programs for special process.

■ Process Flow of Jaime

Features 2   Works as one of the plugins to Eclipse being familiar to you
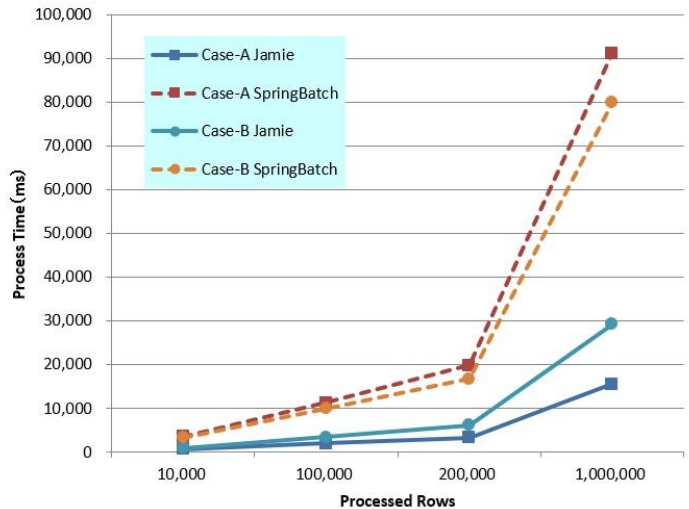

■ Jaime as an Eclipse plugin

Jaime works as one of the plugins to Eclipse which is the standard IDE(Integrated Development Environment) for Java. Only by clicking the Jaime button on the Eclipse toolbar, the window is changed seamlessly and the development work can be continued smoothly within Eclipse environment. Jaime adopts the same operation system and screen design as Eclipse. Thus the same and accustomed look-and-feel of Jaime enables current Eclipse-users to get smooth and natural introduction, as well as development efficiency even just after starting.

From the specified logic patterns, Jaime automatically generates optimized codes for high performance with conforming object-oriented standard.   Also, Jaime has its own high-speed runtime functions which are equivalent to JDBC performance So the generated Java batch program runs 2.7 to 6 times faster than the one of SpringBatch frame work base. Moreover, Jaime has the functions to support to keep high-quality. JCI (Java Code Inspector) detects and removes most of the defective part of codes, including free programming portions. The developers' free programming portions are clearly separated. The standardized codes can be created by any programmers. These functions and advantages minimize the risks to occur the defects of codes.
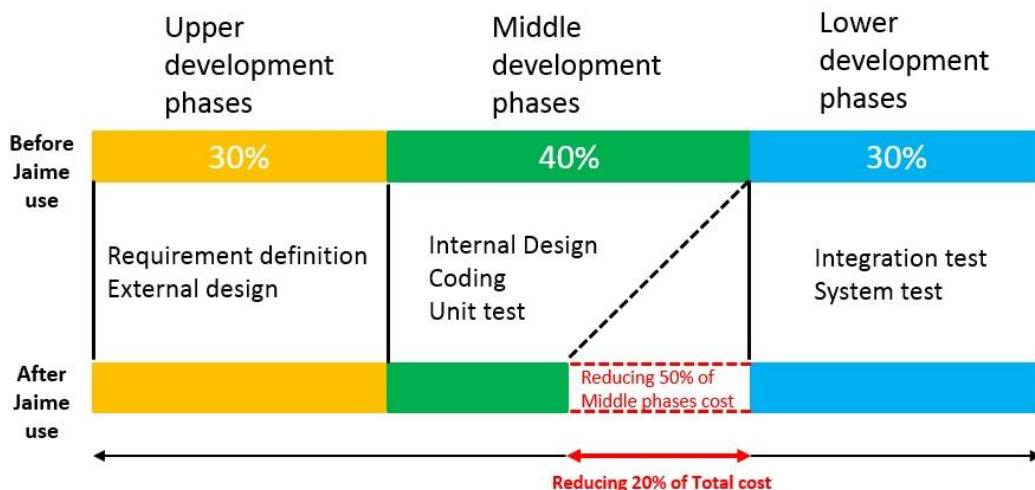
■ Example : Comparison of processing speed between Jaime and SpringBatch

Legend:
- Case-A Jamie
- Case-A SpringBatch
- Case-B Jamie
- Case-B SpringBatch

Y-axis: Process Time (ms), from 0 to 100,000

X-axis: Processed Rows — 10,000, 100,000, 200,000, 1,000,000

Including exception handling procedures, Jaime generates java codes automatically. Thus the quantity of manual coding is only 1/6 to 1/8 compared with the cases of usual programming. Other various features to enhance efficiency for development, such as the templates for typical batch process patterns, reduce 50% of man-hours in the middle phases of the development process (Internal design, Coding, and Unit test). In addition to these, almost no extra man-hours and cost are required to the developers to learn Jaime, if they already use Java, Eclipse, or DB/file systems.

	Upper development phases	Middle development phases	Lower development phases
Before Jaime use	30%	40%	30%
	Requirement definition External design	Internal Design Coding Unit test	Integration test System test
After Jaime use		Reducing 50% of Middle phases cost	

Reducing 20% of Total cost

■ Cost reduction effect by Jaime

■ System Requirements

OS ー Operating Systems that Eclipse3.4 (or later) runs on
Memory ー Minimum 1GB（2GB or more recommended）
Software ー J2SE 5.0 or Java SE 6
ー Eclipse 3.4 or later
[Plugin] ー Eclipse Java development tools(JDT)
ー Graphical Editing Framework(GEF)

- DBMS and JDBC driver for DBMS are required to run a batch program.
- Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.
- Eclipse is a trademark or registered trademark of Eclipse Foundation, Inc.
- SpringBatch is a trademark or registered trademark of the Apache Software Foundation.
- Other corporate names or product names in this document may be either trademarks or registered trademarks.

Jaime was developed based on the research: "Research and Development on automated Java batch programs generation", under a program led by the National Institute of Information and Communication (NICT) of Japan.

Send email to info@canaly.co.jp for any questions or requests for Jaime.