THOUGHT™

CocoBase® Enterprise O/R

WhitePaper

How to cut costs by up to 85% when persisting data in enterprise applications.

CocoBase® Enterprise O/R Whitepaper

INTRODUCTION

Companies typically overspend hundreds of thousands of dollars and more on persisting data in their enterprise-level applications. In contrast, customers using CocoBase® to persist their data are cutting the cost of database access development by up to 85%. These companies are reporting Return on Investments (ROI) estimated at 400% and more.

The key to meeting ROI requirements is using a mature Object to Relational Mapping tool to create and manage database access, versus, the time intensive manual hand-coding of JDBC, SQL, Java classes, JSPs, etc (i.e. no O/R Mapping tool).

Customers are finding the cost and time savings of using CocoBase® makes it possible to meet the following requirements;

- Reduce man-hours dramatically,

- Shorten development cycles from months to weeks,

- Meet and exceed increased project ROI requirements.

Common Problems of Hand-Coded Persistence

The average enterprise component (Java classes, Session Beans, JSP's, BMP, CMP) takes an estimated 20 HOURS to write by hand. To accomplish this, programmers typically use embedded JDBC and SQL in their objects.

The resulting component is a static representation of the data that proves difficult to scale and meet performance requirements. Any changes to the application and/or database requires expensive man-hours to manually rework the JDBC / SQL contained in the component, debug the hand-written code, and then to re-compile.

The additional work required to evolve the component can easily double the time spent from development to completion.

CocoBase® Enterprise O/R

definition

powerful dynamic object to relational mapping tool that manages high performance database access for Java and EJB applications.

why

CocoBase keeps Engineering resources focused on building applications...Not on building and maintaining an o/r mapping layer.

No more coding SQL, JDBC, Java, EJB required.

Cuts the cost of maintaining the database access of an application to nearly zero.

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The Solution

With CocoBase®, the average component takes about 30 MINUTES. This is a reduction of 19.5 hours, almost 4000% decrease in man-hours. The resulting component, which is standards based and editable by the programmer, meets and exceeds scalability / performance requirements. Any changes to the component are quickly handled in the CocoBase® GUI, keeping time spent for edits to just minutes.

CocoBase® takes the database specific code and prewritten SQL out of the object and saves this information to the mapping layer (i.e. map). Thus de-coupling the object from being hard coded to the database. The database specific code and SQL is dynamically created at runtime. This allows objects to be easily reused over and over. This Dynamic O/R Mapping™ layer provides a multitude of performance and scaling optimizations that are easily changed by the programmer to best fit their specific needs.

The Money - Project Cost of Manually Coding JDBC and SQL

Customers report that the average project requires about 100 components to be written. The *initial* cost of developing 100 components runs about $100,000 in labor. This is based on average developer cost of $50 per man-hour * 100 components * 20 hours / component; about $1,000 per component.

This estimate takes little into account for additional time spent editing and changing components as the project evolves. This involves, for example, performance tuning of the SQL, rewriting components to reflect changes in the database, and structural application changes to meet evolving business needs. The static nature of these manually written components become very time intensive to keep tuned to perform at expected levels throughout the development cycle.

The project budget can expect that additional programming during development to typically increase component time by another 10 - 20 hours (50 - 100%). And considering that most organizations will have to maintain the application as it matures, an additional 10 hours (50% increase) per component can be expected.

Standards Based

EJB 2.0
JDBC 2.0
JMS 1.0
UML XMI
J2EE / J2SE / JSME
JDK 1.4

Integrations

Application Servers

BEA Weblogic
Borland
IBM WebSphere
JBoss
Macromedia JRun
Oracle9iAS
Orion
SunOne iPlanet
Sybase EAServer
Tomcat

Development Environments

Borland JBuilder
Eclipse
IBM WASD
SunOne Forte

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Therefore the total cost of those 100 components, over the life of the project, can cost a company about $200,000. Of course, this estimate does not take into account any unexpected changes during the project.

Estimated Time in Detail for Manually Coding ONE Component:

20 hrs initial development
10 hrs for changes during development
10 hrs for maintaining component

40 hrs = Total Hours

Estimated Total Cost in Detail for Manually Coding:
40 man-hours / component * 100 components * $50 / man-hour = $200,000.

The Money - Project Cost of Using CocoBase® for the Same Project

The programmer can use CocoBase® to create, compile, deploy and maintain the same components (Java Objects, EJB BMP/CMP Entity Beans, Session Beans, and JSPs) in about 30 minutes per component. This means that those 100 components at $50 per hour will run a company about $2,500 in labor (1/2 hr * $50 / man-hour * 100 components).

The components (i.e. Java code) generated are designed to scale and perform. The templates that generate the code are battle tested on deployed customers and are available as source code. Additional savings is created since these components are reusable for other projects.

Maintenance costs go almost to zero since the CocoBase® generated components can be changed on the fly, without requiring regeneration and recompile of the application code. If the DBA needs to performance tune the database and change the underlying structures, it can be done all through the CocoBase® map, thus minimizing the use of programmers.

Major companies use CocoBase® for their corporate applications;

Bell Atlantic,
Bell South,
Best Foods,
Bristol Meyers Squib,
CVS,
Deutsche Bank,
Eli Lilly,
Ericsson,
Expeditors,
GTE,
Harte Hanks,
HBO,
Kansas State Government,
Los Alamos Labs,
State of Maine Government,
NCS Pearson,
Nextel,
Nike,
Ohio State Government,
U.S. Federal Government,
Perot Systems,
Siemens,
Sun Microsystems,
TRW,
Tyco,
Visa,
World Com,
Xerox and more.

Pricing

Thought Inc.® is a product oriented company that sells a simple to use solution focused specifically for enterprise-level engineers. This means that CocoBase® is designed to work out of the box. The programmer simply installs the tool, runs through the tutorials, and nine times out of ten, is developing with little to no assistance. This is a key aspect in keeping costs down and ROI high.

For those situations that need assistance, our technical support team and sales engineers are there each step along the way to answer questions and even provide architectual overview if needed. This means that we will look at your specific code and help solve any related problems that arise. You would be charged for this custom sales engineering support from almost every other vendor (i.e. in the form of project consulting), however, it is included with CocoBase®.

The price for CocoBase® is $6,000 per developer, which includes the first year's email technical support and major & minor product upgrades. Since all developers require a license, we discount those who are indirectly using CocoBase®. This keeps the cost directly related to the use of the tool and meeting ROI requirements.

It is important to note that there are no additional charges per CPU / Server / Runtime, for documentation, for unnecessary training, etc. And you have the comfort of knowing that your engineering team does not have to become experts in the underlying technology, as can be required with open-source tools.

The pricing structure is specifically designed to fit into the typical *fixed* IT project budget.

Additional savings are available as CocoBase® can be used by the same developer on other projects. This spreads your cost over different projects thus increasing ROI continually.

The Final Cost Comparison

Let's say a company has 5 developers working on a project and they

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have 100 components. We have shown that those components written by hand will cost over the life of the project about $200,000. With CocoBase®, those same components will cost about $2,500 in labor. Purchasing five licenses for CocoBase® will cost an organization about $30,000 ($6000 per developer * 5 developers). And expect a short learning curve which will result in about $2,000 of labor.

The total cost for those same components, using CocoBase®, is about $34,500.

This is a cost savings of $165,500. A ROI of about 480% ($165,500 saved divided by $34,500 invested). This ROI does not even include additional cost savings from reuse of components or using CocoBase® for additional projects.

Litmus Test

With CocoBase spend $34,500.
Without CocoBase spend $200,000 and more.

The question quickly becomes...Can you afford not to use CocoBase® for persisting data in your enterprise applications?

Don't wait, download a FREE copy of CocoBase® today.

Company Information

THOUGHT Inc.®, in business since 1993, has been shipping the CocoBase® Enterprise O/R product since early 1997 and is currently in its' 4th major release. THOUGHT Inc.® invented and patented repository based Dynamic Object to Relational Mapping™. CocoBase® is by far, the most mature Java based O/R Mapping tool available and leads the industry in technological innovation. This is why so many of our customers rely on CocoBase®!

For more information please see the website at www.thoughtinc.com. Sales people are available at (415) 836-9199 and by email at sales@thoughtinc.com

Map It !

Create Maps from objects to tables, tables to objects, existing objects with existing tables, existing object models using transparent persistence, UML / XMI object models. CocoBase supports the the largest number of ways to map between objects and tables.

Generate It !

Generate Java Code from preset editable templates including; Dynamic Transparent Persistence, Java Persistence classes, EJB CMP/BMP Entity Beans, Session Beans, JSPs and Servlets.

Deploy It !

Deploy Java Classes and/or EJB's to all of the most popular J2SE / J2EE Application Servers as well as stand-alone.

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Patents
CocoBase® is a patented product under patent #5857197 as well as patents pending on related topics.

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