



Quality Custom Java and Web Enterprise Solutions



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### About SoftAMIS

SoftAMIS is specialized in custom software development and provides high quality Java and Web development services.

Our strong intention is delivering state of the art enterprise software solutions on time and in budget. We are using the latest tools, technologies and methodologies that allow us to meet and satisfy customers' needs and expectations.

SoftAMIS is fast growing company that joins forces of very experienced software developers and our highly motivated team is always ready to deliver the best solutions money can buy.

SoftAMIS was founded in February 2000 and successfully worked on outsourced projects for different clients around the world (primary located in UK, USA and Germany).

Besides custom software development, SoftAMIS offered own products. Our flagship product was Productivity! for JBuilder – a set of tools intended to increase productivity of Java developers utilizing Borland JBuilder. Currently, this product is further maintained and supported by another company – you can find it on <u>www.jproductivity.com</u>.

Quality of our work was awarded by Borland Software Corporation (<u>http://www.borland.com</u>) since SoftAMIS gained Borland Technology Partner status.

Products developed by our company were highlighted on Sun site as good examples of user interface creation using Java technology

(http://java.sun.com/products/jfc/tsc/sightings/S10.html).

SoftAMIS is located in Kharkov, Ukraine - SoftAMIS is located in Kharkov, Ukraine - a former Soviet republic with high level of education and computer literacy. Because of the smaller competition on the labor market, SoftAMIS is hiring the most experienced and skilled professionals, which results in a significantly higher concentration of top talent in our team. Ukrainian culture is very similar to the culture of North America and Western Europe, which reduces some of the problems that result from teams of differing cultural backgrounds working together and allows better understanding of the subtle cultural and aesthetic issues in software human interface design for a western market.

#### Services – Building High Quality Solutions

SoftAMIS provides full cycle of software development and consulting services - from requirements definition to deployment and maintenance of the developed software and from reengineering any existing solutions to building turnkey solution from scratch. Our approach includes the following stages:

- Problems and requirements definition;
- Finding and analyzing possible solutions;
- Recommending the best solution based on the TCO vs. features and benefits criteria;
- Planning the development;
- Designing and implementing the solution with the best quality, in time and in budget;



- Writing developer and end-user documentation;
- Deploying and maintaining ready solution;

SoftAMIS can provide the development services in wide range of areas. Business areas of our experience and interest include:

- CRM and ERP systems;
- GIS systems;
- Logistic systems;
- B2B and B2C e-commerce systems;
- Enterprise information systems;
- Custom business solutions;

IT technology areas of experience include:

- Internet/Intranet solutions;
- Databases and database driven systems;
- Distributed n-tier systems;
- Development of instrumental tools;
- Re-engineering and systems integration;
- Standalone GUI applications;

### Products And Custom Projects – Outlining Work Has Been Done Right

SoftAMIS has been developing software solutions used for packaged products, in-house applications, and web sites, using a variety of programming technologies. We have experience in custom consumer software, business and marketing applications as well as in custom Web based solutions.

The following outlines the most interesting projects developed by our company as well as projects with direct involvement of our developers:

- Fitness Clubs Management System complete web oriented solution intended to solve everyday tasks in health and fitness industry. The main purpose of the system is complete clubs management, support of sales force automation, management of club members, support of selling contracts and services, performing monthly billing and calculating and collecting fees for club services usage;
- ELF development platform for rapid creation of web based enterprise level systems;
- PictoPOS general purpose Point Of Sale system;
- XMC the XML management and authoring system with support of extended validation according to business rules supported by appropriate document;



- WebCamOperator online browser based video capturing and monitoring system;
- Online Corporate Sales System web based solution oriented to support and automating of selling fitness clubs membership to corporate clients;
- OptiNet II the system for analysis and optimization of dealer areas and dealer networks distribution;
- Mystic the components framework for rapid building Web applications;
- BAF- backend framework for rapid building dynamic e-commerce applications;
- Change Companion the system for companies' structure change management and business performance analysis;
- NewOSCAR online products catalog and ordering system;



## **Projects Were Fully Developed by SoftAMIS**

This section outlines projects that were completely developed by SoftAMIS.

## Fitness Clubs Management System

Highlights:	Web based system which supports business processes in health and fitness industry.	Firmer .
Туре:	Complete solution	
Architecture:	Distributed n-tier system that utilizes concept of central server, replication server and set for club servers	
Platform:	Java 2 Enterprise Edition	See to be a set of the second
Tools:	Borland JBuilder, MS SQL 2000, MySQL, JBoss, Apache Tomcat	Terrer (
Technologies:	Java, EJB, JMS, JDBC, JTA, JNDI, Struts, Java Mail, JSP, Servlets, Java POS	The function of the control of the function of the control of the

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The system is intended to provide a web-based distributed system that should support business processes in health and fitness industry.

The main purposes of the system are as follows:

- 1. To help salespeople acquire new members implemented via CRM and Contract/Service Management modules;
- 2. To help clubs to better service members implemented via Check-in, Help Desk, Community, Email Management and Scheduling modules;
- 3. To provide management accurate statistics on what is happening to the prospects, members, and employees implemented via Accounting Integration, Reporting and the Dashboard modules;
- 4. To accurately collect (and report on) money from ProShop sales and Membership/Contract Sales implemented via POS/Inventory, Billing, and Accounts Receivable management modules;
- 5. To provide convenient management of employees and facility.

The system provides functionality that allows:

- Management of multiple clubs;
- Manage club personnel and track personnel time;
- Manage club inventory and facility;
- Automate sales process and increase productivity of salespersons;
- Manage prospective customers and support communication between club employees and prospective members;
- Create and manage various member' contracts;
- Manage club members;



- Manage club shop and sale various goods;
- Register club services usage by members;
- Assign task to employees and track their progress;
- Obtain and track accounting information;
- Calculate money should be charged for services usage and issue invoices;
- Obtain and analyze various statistical information via different reports;

The system has distributed architecture that includes central database and application server and set of separate servers that are installed in clubs. Communication between these servers and data replication is performed via appropriate synchronization protocol. MS SQL 2000 is used as central database server, MySQL is used as club database, and JBoss is used as application server.



### ELF

Highlights: Type:	Platform for rapid creation of enterprise level web applications Complete solution	07 33
Architecture:	N-tier framework for business applications development	taria ta
Platform:	Java 2 Enterprise Edition	
Tools: Technologies:	Borland JBuilder, JBoss, MySQL Java, EJB, JDBC, Java Mail, JSP, Servlets, Jasper Reports, Struts	
Scope:	4200 man/hours	Transfer

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ELF software represents a platform that is intended to simplify rapid development of enterprise level Web applications that utilizes complex backend logic and offers rich and functional user interface.

Development of ELF platform was governed by the following goals:

- Provide a platform that will allow rapid development of complex web based business applications via code reuse and set of pre-built components;
- Due to nature of constantly changed business conditions, applications created based on platform should provide high level of flexibility, easiness of maintenance, support and further evolution;
- High performance and scalability of created solutions;
- Built-in fine grained security and access rights management system;
- Support of localization;
- Clear separation of underlying business logic, presentation and core system logic;
- Support of different formats of business data rendering;
- Offering end users web based yet convenient and powerful interface;

To meet these goals, comprehensive platform was created. The platform could be considered as foundation for building complex enterprise level applications. ELF is logical evolution of previous projects developed by SoftAMIS, built on the top of state of the art technologies with utilization of unique real life experience gained during development of various projects.

The following set of ready to use components forms ELF functionality:

- Users managements and audit;
- Business transactions support;
- Custom query engine with support of ad-hock queries;
- Workflow engine for performing custom business transactions;
- System audit and monitoring;



- Data versioning system along with support of history for sensitive business data changes;
- Email sending subsystem;
- Report generation subsystem;
- User Interface rendering subsystem;
- User interaction processing frameworks;
- Sophisticated user input validation system;
- Skinnable interface and look and feel management subsystem;
- Scheduler subsystem.

ELF Platform is ASP (Application Service Provider) ready – due to support of various profiles, using ELF it's possible to develop applications that are typical for ASP model quite easily.

ELF system is built to be open and configurable. It utilizes tools and technologies that are widely adopted by industry and due to this the learning curve for ELF platform is extremely short. Moreover, it utilizes exceptionally high level of separation between developers responsible for user interface and ones responsible for business logic development. Such feature allows ELF platform to be an ideal candidate for successful team development.

Due to clean design and high level of modularity, any part of the platform could be customized and extended to provide ideal solution that could satisfy requirements of any particular business application.

ELF platform was used in several real life projects that represent quite complex business applications and proven its reliability, performance and unique level of development productivity it offers.



Highlights:	Highly customizable generic purpose POS software
Type:	Complete Solution
Architecture:	n-tier distributed application
Platform:	Java 2 Standard Edition, Java 2 Enterprise Edition
Tools:	Borland JBuilder, JBoss
Technologies:	Swing, JavaPOS, RMI, Java, EJB, JDBC, XML
Scope:	1600 man/hours

## **PictoPOS**

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The PictoPOS software is generic purpose POS software that could be used for selling arbitrary goods and services. It supports both touch screen and standard operations to provide the most efficient and convenient way of making sales. All business workflows supported by PictoPOS are optimized to deliver best performance when touch screen is used.

PictoPOS supports several modes of functioning:

- Standalone mode in which it could be used as standalone POS application.
- Client-server mode, in which one central server exists and serves several POS stations;
- Integrated mode, in which PictoPOS is integrated with some third party system used for inventory management and accounting. Oracle Small Business Suite is sample of such third party system (integration is performed via smbXML protocol);

Built to be open for integration with various accounting and inventory management system, PictoPOS provides extremely rich functionality that allows to integrate it with arbitrary any third party system.

PictoPOS was created with clear understanding of uniqueness of every particular customer needs. That's why it was built using architecture that allows customizing it to meet required goals. It is possible to customize eventually any aspect of PictoPOS functioning, such as:

- Business rules it's possible to specify rules that defines how to work with taxes, discounts, how to work with particular customer, how to close/open shift or day, which users are allowed to perform which operations etc;
- User interface location and content of all panels, color, fonts, images and text location for buttons;
- Interaction with the user all actions that are performed as result of user command are customizable;
- Working with hardware PictoPOS is built using JavaPOS platform that allows it to utilize arbitrary any POS hardware for which appropriate drivers exist.
- Printing capabilities it's possible to tune every aspect of receipt and reports printing.

PictoPOS includes built in support of various POS hardware – receipt printer, barcode reader, magnetic strip reader and cash drawer. It allows to sell both services and goods, store history



of purchases for particular customer and take payments using cash, credit cards, checks as well as take payments on account or member deposit. All operations and transactions performed within PictoPOS are logged and available for further audit.

PictoPOS includes various policies that define where one or many salesperson may work on the same POS station.

If PictoPOS operates in client server mode, it supports functioning both via Intranet and Internet. To insure data safeness and high speed of communication between client and server software, PictoPOS uses internal communication protocol that represents custom implementation of RMI and SSL.

Client part of PictoPOS system is implemented using Java Swing library which is used for GUI rendering and using JavaPOS for working with POS devices. Server side is implemented based on JBoss application server.



Highlights:	Universal console used for	12 Xani Editor - Facade Registry (E 'Local'd	Fitaes:/Securces/Projects/#FitaesiSe	rver/#05FacadesRegistry set/[		- IDE
Туре:	authoring and validation of XML documents that describe custom set of business logic. Complete Solution	Precede Hausers     Processe Hausers     Processe	Facado Registry     Pacado Registry     Pacado Registry     Pacado Registry     Pacado Regist     Secondar Posselar			
Architecture:	Standalone GUI Application		Facadas Packagas Properties	. ABD Holese Protticiger Facilitie Protticiger Facilitie	Lovel JHD Name ProtLoger Vesamicost ProtLoger Vesamicost	
Platform:	Java 2 Standard Edition		Protocondigifaciana Protocolar Deservitivende	PolicardyFacase	POlicantyFacadeLocal	Reent
Tools:	Borland JBuilder,	B ∲optienter B Argument B ∲optient B ∲optient				
Technologies:	Java, Swing, SAX, Jakarta Digester	= +P getCadover = +P getCadover = +P getCado = +P getCado				
Scope:	600 man/hours	in the get account in the get account in the get based in the get vacuum in the get				
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The XML Management Console represents standalone Java Swing GUI application used as tool for editing various XML documents. While potentially XML management console may work with arbitrary XML documents, the main goal of it is to provide strong support of custom XML documents authoring that may reflect and declare part of various complex business logic utilized by different applications.

XMC is ideal solution for editing data oriented XML documents, such as configuration files, deployment descriptors, metadefinition documents etc.

There are several goals that are solved by the application:

- 1. Simplification of creation and editing data oriented XML documents using rich and convenient GUI;
- 2. Support of custom data verification and validation rules that may not be achieved by standard XML authoring tools but which could reflect particular business rules applicable to XML document.

During design and implementation of XMC software, flexibility and support for further evolution of application along with tasks that could be solved by it was considered as one of the most important requirements. That's why this application was created using very flexible, modular and open architecture.

Due to unique architecture, XMC may be customized to tailor any particular and most demanding needs that may occur during editing data oriented XML documents.

There are several highlight features of the applications.

First, XMC utilizes unique GUI generation engine that is created using principles similar to ones employed by XUL concepts – all GUI forms used for data displaying, navigation, editing and validation are completely dynamic and is created on runtime based on appropriate XML descriptors that are defined for particular format of XML.

Another unique feature of XMC is support of sophisticated validation rules. These rules are also dynamic and may be constructed for any particular type of XML document. Together with intuitive and intelligent error reporting functionality offered by XMC, document validation rules



### XMC

provide powerful and rich mechanism that allows creating and validating complex business oriented XML documents.

Creation and editing of XML documents is major goal of XMC. However, XMC may be used even beyond that scope. Due to built-in system of plugins, functionality of XMC may be easily extended to include unique particular features, such as XML transformations, generation of custom code etc.

XMC application was created using Java 2 Standards edition, Swing library for GUI generation and Borland JBuilder as primary development tool.



Highlights:	Web Based system used to support web cams, pictures capturing and online video monitoring	Video Source
Type:	Complete Solution	Advanced [Equilate Source ] Desice Settings ]
Architecture:	Client-server application	P bitmets Ban Conid Expose
Platform:	Java 2 Enterprise Edition, Delphi, Windows	Inage Main Mine Unicedal Mine Vertical
Tools:	Borland JBuilder, JBoss, Delphi	Image Enhancement Anti Ficker Low Light Sout Diff
Technologies:	Java Servlets, Active X, Video For Window	Color Boost C SDHc (Sunoen) F gDHc (North Asserce)
Scope:	540 man/hours	OK Cancel dately

### **WebCamOperator**

The WebCamOperator software represents distributed two tier system that is used to support various operations related to web cam, such as picture capturing and collecting, online area monitoring and working with storage of captured images.

The system is built using client-sever architecture. Client part consists of several modules responsible for performing web cam operations and communication with server part using custom protocol. Server part of the system is responsible for storing, indexing and providing images on demand.

Unlike to other web cam software, the WebCamOperator software may run directly within web browser and does not require any installation process.

Capturing of images is only one part of system functionality. Another part represents browser based monitoring of remote web cameras. Client part of the system may be installed as appropriate component of operating system that captures video from web cam and transfer it to central server.

The system also provides ability to perform various operations with captured images. In addition, the system allows captured images to be exposed outside the system using appropriate set of API as well as via built in web server. In addition, captured images could be automatically sent by email.

Server part of the system was implemented based on JBoss application server using J2EE technologies. Client part of the system was implemented as set of ActiveX components using Borland Delphi as development tool.



## **Online Corporate Sales**

Highlights:	Web based solution for health and fitness industry intended to support process of selling fitness clubs membership to corporate buyers.
Туре:	Reengineering
Architecture:	Three tier business application
Platform:	Java 2 Enterprise Edition
Tools:	Borland JBuilder, JBoss, MySQL, RiTA (credit cards processing gateway)
Technologies:	Java, EJB, JDBC, Java Mail, JSP, Servlets,
Scope:	3500 man/hours

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The system represents Web based solution for health and fitness industry. It is intended to support and automate process of corporate sales – such as sale of contract to a member who is employee of third party company.

The system utilizes ASP (Application Services Provider) approach.

In general, the system is used both by potential members and by club and companies employees. Members are able to use the system to find information about clubs and services, to enroll (purchase a contract) and manage their membership in self service mode.

For club and company employees, the system provides even richer functionality. It allows to manage content of member area (one that is accessible by members), create new types of contracts that could be sold, manage and approve contracts, analyze sales and perform mass email sending. In addition, the system allows club sales persons sell contracts to members.

Once the data are captured by the system, the membership information is further transferred to the third party member management systems.

To support and simplify process of communication between salespersons and club members', the system offers rich Help Desk functionality.

The system includes functionality that allows member to pay for services online using their credit cards. To secure sensitive business data, all communication between server and the end user browser are performed using SSL protocol.

The system was developed as result of complete reengineering and redesign of existing system.

The system was developed using stack of technologies that are includes into Java 2 Enterprise Edition platform. Internally, the system was designed using thee-tier architecture. The entire system functionality was logically distributed between database layer, application service tier and web UI generation tier. MySQL database was used as database backend, JBoss application server was used as application servers. EJB technology was used to implement business logic.



## **Productivity! for JBuilder**

Highlights:	The rich set of tools intended to increase productivity of Java developers utilizing Borland JBuilder
Туре:	Commercial product
Architecture:	Set of extensions for Borland JBuilder IDE
Platform:	Java 2
Tools:	Borland JBuilder 4-X
Technologies:	Java, Swing, JBuilder Open Tools API
Scope:	3200 man/hours

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Productivity! is a genuine and rich set of development tools intended to greatly simplify routine coding and navigation operations for Java developers those utilize Borland JBuilder IDE. Productivity! includes more than 40 development tools and improvements, which belong to the following groups:

- Code Generation Tools
- Power Tools
- Editor Enhancements
- IDE improvements
- Navigation Tools
- Information Tools

Code generation tools allow generating getter/setter methods, overridden methods, implementation of interfaces, and implementation of constructors as well as generating delegating method.

Power Tools includes tools that add more intelligence to IDE – such as background code analyzer and various assistants used for correction of errors, task list and advanced to-do items, sophisticated code templates mechanism and WYSIWYG Java Doc editor.

Functionality of editor included into JBuilder is also significantly improved by Productivity!, by adding full fledged clipboard manager, custom code structure based text selection functionality, highlight of changed places of code and advanced code indenting functionality, to name a few.

Productivity! simplifies more of navigation tasks that may occur during development process by providing advanced persistent bookmarks manager, tools for navigation within source code based on syntactical structure of code and quick navigation to Java classes.

In addition, Productivity! includes notable amount of various IDE improvement that allows the end user to work with projects, source code and help system more efficiently.

All Productivity! tools are carefully designed and tuned to minimize efforts to invoke and use them.

Using of all improvements and power tools offered by Productivity!, Java developer gains significant speedup of development productivity and decrease of coding time up to 15-20%.



## Mystic Web Components Framework

Highlights:	The components framework for rapid building Web applications
Туре:	Complete solution
Architecture:	Framework for rapid development of Web Applications
Platform:	Java 2
Tools:	Borland JBuilder 4, Tomcat 3.2
Technologies:	Java, Servlet API, JSP 1.1, DHTML, JavaScript
Scope:	4200 man/hours

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The project represents a library of components intended for rapid creation of dynamic web sites. All functionality of this framework is wrapped into set of custom JSP tags that allows Java developers and even Web designers use it easily.

All components are built around common architecture based on Model/View/Controller approach and this architecture is similar to widely adopted Java SWING one. Having similar architectures allows easier migration from standalone GUI applications to Web ones. Each component can be placed into container that manages and layouts all its child components. Since presentation of component is delegated to the specially written Java class or even to the JSP page it allows easily changing and customizing of the look and feel.

Framework includes powerful form processing and validation rules as well as sophisticated events processing capabilities that allow building robust and functionality oriented Web sites.

There is set of components which are wrappers for standard HTML ones like INBUT, BUTTON etc. The framework also introduces a set of advanced components which are quite usual in standalone applications and now available to build Web applications as well. These components include Outlook like bar, tree view, tab set, table and other components.

Framework also includes built-in advanced resources management functionality used for localization and personalization purposes. It allows specifying texts, images, pages, scripts and other resources according with selected locale, style and profile settings.

The project is implemented in Java language using Borland JBuilder 4 as development tool.

The JSP, Servlet API, HTML/DHTML and JavaScript technologies are used to build components.



## **Business Applications Framework**

Highlights:	Framework for rapid building dynamic e-commerce applications
Туре:	Complete solution
Architecture:	3-tier distributed system
Platform:	Java 2, Oracle 8i
Tools:	Borland JBuilder 4, Oracle 8i, TOPLink 2.5
Technologies:	Java, Swing, Java 2D, XML, JavaMail, Object Relational Mapping, RMI, JDBC
Scope:	About 2200 man/hours

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The project represents system for dynamic creation of Web sites using solid methodology based on technologies included into Java 2 Enterprise Edition. Usage of this framework allows considering process of application development as process of integration of predefined and yet customizable components. Framework assumes object-oriented approach for definition of the problem domain specific entities as well as their relations. It contains basic functionality for support business logic as well as shared code base for application development and customization. Functionality is divided to set of services with well-defined and well-documented interfaces and lightweight classes that implement the core functionality of the system.

The framework is composed from the following subsystems:

- Workflow Management System responsible for management of workflow definitions and execution of workflow instances;
- Security Manager responsible for providing uniform controlling the access to system data as well as access to particular pieces of functionality;
- Objects Management System used to provide uniform access to object meta-data information as well as access to object instances. In turn, the Object Management System includes:
  - Object Persistence System responsible for providing uniform interface to various persistent storages used to preserve state of the objects. This system allows performing object browsing and search as well as object maintenance. Maintenance of objects is performed within context of transaction that is also provided by this subsystem.
  - Objects Metadata System intended to maintain and provide information about object structure (metadata). In general, this subsystem is quite similar to the Object Persistence System, except that it handles object metadata rather that object instance;
  - Method Invocation System responsible for location of the actual code for Business Objects' methods and performing theirs execution;



- Presentation System provides interfaces and functionality required to support different types of collaboration with the principals;
- Session Management System lightweight system used to provide uniform approach for sessions support. In general, its main purpose is to encapsulate underlying session management, provided by the hosting environment (Servlets/JSP session management or EJB session management, for example);
- Authentication and Authorization System defines whether a principal is eligible to access the particular application and assigns security role for principal. This system is used mostly during login of the principal to the system.
- Auditing System provides uniform and centralized approach for implementing of the system audit.

The figure at the top of the page shows the shot of sample client application that tightly works with server one written using Business Applications Framework. This application allows viewing and maintaining of metadata, localization and security information.

The project is implemented in Java language using Borland JBuilder 4 as development tool.

The system utilizes a number of J2SE and J2EE technologies like Java Security API, Java Transaction API, and Bean Contexts API etc.

There is a built-in persistence adapter written using TOPLink middleware. It allows to use a relational database, accessible through JDBC protocol, as persistence storage.

XML is used as primary interchange format that allows communication between running systems, export/import and backup operations etc.

JSP, Servlet API, HTML/DHTML and JavaScript technologies are used to build Web client applications.



## Projects With SoftAMIS Engineers Involvement

This section outlines projects that were developed with involvement of SoftAMIS engineers.

## New OSCAR

Highlights:	Online products catalog and ordering system
Туре:	Reengineering
Architecture:	3-tier distributed system
Platform:	Java 2, Oracle 8i, InterBase
Tools:	Borland JBuilder 3, Oracle 8i, TOPLink 2.5
Technologies:	Java, Swing, Java 2D, JavaMail, InfoBus, Object Relational Mapping, RMI, JDBC, XML (SAX), JSP, Servlet API, DHTML/Java Script
Scope:	About 14200 man/hours

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NewOSCAR is a business system that provides electronic Internet and Intranet catalog and ordering facilities for consumers in the office products supply chain (Wholesaler - Dealers - Consumers). The system provides the rich set of functionality needed to locate and order any products and is intended to complement or replace usual paper catalogs.

The project comprises of two parts: back-end that serves as data storage, business logic tier and Web server and HTML and Java front ends. The Java client programs intended to use by dealers and experienced consumers while Web browser based client to the majority of customers.

The Java client program allows catalog browsing, products ordering, maintenance of catalog structure and catalog access policy. The program is very powerful and user friendly as it utilizes usual graphic user interface with full drag and drop support, browser-like navigation, shortcuts to the most used actions, wizards etc.

The Web based client program has practically the same functionality as the Java one excluding catalog maintenance facilities. This program is oriented to the majority of customers, which need catalog browsing, ordering and restricted reporting functionality only. They can start working with it right after registering on the site and without having to download and install any big components; having troubles about database integrity and need of periodic versions update.

Both of client programs allow the users (dealers and consumers ones) to browse product catalog using several views starting from product list and ending full-detail product review. The user can find products using simple and sophisticated search functionality that allows easy location of products without need to browse the whole catalog. The programs introduce powerful ordering functionality that allows adding products to order, changing products quantity, orders searching, modifying order and order lines. Authorized orders can be transmitted to the server and start the product delivery chain.



Only Java client program allows dealers to customize and administer their catalogues using convenient graphic user interface. The dealers can customize the appearance of their catalogue by selection of one of the provided catalogue styles, supplying the company logo and services information. They can change the default catalogue structure, add full product information for own products, including pictures, change properties of existing products, and administer pricing profiles using many price adjustment policies. Dealers can allow or disallow certain activities for their consumers. Powerful reporting facilities are provided for purchasing and connection activity analysis.

In addition to catalog related functionality, consumers may use user administration one, which includes facility for access group management, department management and cost center maintenance.

The project is implemented in Java language using Borland JBuilder 3 as development tool.

The business logic and database access middleware reside on the homegrown application server written in Java as well. The application server exposes its services through Java RMI protocol. To gain object-oriented access to the database, TOPLink middleware is used. It connects to the Oracle 8i database through JDBC protocol. Having such an object-oriented access simplifies development and isolates developers from low-level API calls and differences between particular relational databases.

The XML is used as primary interchange format that allows communication between running systems, export/import and backup operations etc.

The Java Swing library is used to build GUI Java client application. Standard GUI components as well as extended and specially developed ones were utilized for UI development. Java InfoBus technology is used to wire together all the data-aware components.

The JSP technology along with Servlet API is used to build Web based client application.



Highlights:	The system for companies' structure change management and business performance analysis
Туре:	Complete solution
Architecture:	3-tier distributed system
Platform:	Java 2, Oracle 8i
Tools:	Borland JBuilder 4, Oracle 8i, TOPLink 2.5
Technologies:	Java, Swing, Java 2D, XML, JavaMail, Object Relational Mapping, RMI, JDBC
Scope:	About 5000 man/hours

# Change Companion

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The Change Companion represents system for establishing activity sequences and hierarchies, capturing, updating status and disseminating (viewing, printing, summarizing, building presentations) change activity information, enabling selection of methodologies and a deployment strategy appropriate for the levels in the organization, current environment and situation, and desired outcomes. For example, deploying the Action Strategy Review module at the division level to define the strategies and some high level initiatives; deploying problem solving teams on the shop floor, and a Process Reengineering effort in Marketing and Sales; with scorecards for critical performance measures company-wide.

As a data repository for all activity data, from top-level strategies and initiatives to individual action plan tasks to raw scorecard data, provides visibility, in summary and detail, of objectives, action plans, status, and graphs. Individuals can directly access activities in which they are involved, and are e-mailed notification of their inclusion in new activities. Security is maintained by assigning edit or update permission on an activity/project basis, with all other areas available for viewing only.

The system allows maintaining the structure of any size organization and allows specifying particular business processes list for the each organizational level. Each business process is represented by set of diagrams those define data model and graph of operations. The system provide powerful diagram editing capabilities with easy to use graphical user interface with proven drag and drop editing, reach formatting and layout options etc. The specially designed repository allows storing diagram building blocks and even whole diagrams in a way that provides reusing them across the whole enterprise.

All the data entered and maintained by the Change Companion may be used in the different business analytic methodologies like Balanced Scorecard, Six Sigma etc. It allows modeling of organization structure changes and counting different business performance calculations and selecting the best and effective way to reorganize business. The diagram versioning capabilities allow gaining historical analysis for any period of time.

As the data entered to the Change Companion database may be very important for the enterprise the system imposes strict rules to access particular system functionality and different kinds of the data. Only authorized users may get access to the system and only the administrator could assign required permissions to the particular user. The system maintains



distribution of the users among access groups that allows specifying of permissions per access group or per particular user basis.

The system introduces company profile concept that allows hosting the data for the several companies on the one physical server. It allows decreasing the total cost of ownership for the small companies while maintaining strict isolations of one company data and operations from another company ones.

The project is implemented in Java language using Borland JBuilder 4 as development tool.

The system is implemented as distributed application. It consists of end user client application server, relational database and management console.

The business logic and database access middleware reside on the homegrown application server written in Java as well. The application server exposes its services through Java RMI protocol. To gain object-oriented access to the database, the TOPLink middleware is used. It connects to the Oracle 8i database through JDBC protocol. Having such an object-oriented access simplifies development and isolates developers from low-level API calls and differences between particular relational databases.

XML is used as primary interchange format that allows communication between running systems, export/import and backup operations etc.

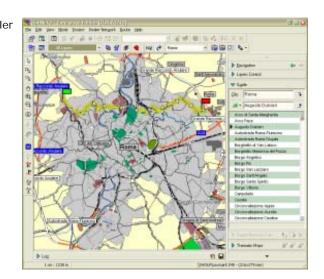
Java Swing library is used to build GUI Java client application. Standard GUI components as well as extended and specially developed ones are utilized for GUI creation.

Java Mail API is used to send confirmations about changes in the user activity or involvement.



# OptiNet II

Hi	ghlights:	The system for analysis and optimization of dealer areas and centers distribution
Ту	/pe:	Complete solution
Ar	chitecture:	Standalone desktop application
Pla	atform:	Win32
Тс	ools:	Borland Delphi4, Paradox, MS SQL
Te	chnologies:	VCL, Win32 API, BDE, SQL
Sc	cope:	About 23600 man/hours



OptiNet is a powerful GIS and data analysis system for company dealer networks management and optimization. It is designed for company sales departments and helps in finding the best places for dealers' locations within certain territory, and defining the area for each dealer. OptiNet employs several criteria for such an optimization process. These criteria include the optimal form of the proposed regions, the low cost land renting, the minimal time needed to reach a dealer center etc. The system combines a state-of-the-art cartography system and a simple point-and-click MS Windows based user interface.

The main functions of OptiNet are:

- User-friendly cartography data representation, including:
  - Multiple layers data visualization (including zooming, scrolling etc.);
  - Getting objects information using point-and-click approach;
  - Showing the legend for all the object on the map;
  - Maps printing.
- Interactive data analysis:
  - Changing objects properties (changing area size, dealer location etc.), and observing the changes in the objects parameters;
  - Printing dealer area reports;
  - Showing potential residents, their most probable movement direction and a number of analysis methods.
- Data optimization:



- Combining a number of areas into a smaller number of areas (aggregation);
- Defining the best places for dealers' locations in each area, obtained as a result of the aggregation (minimizing the time needed for potential customers to get to the location either by streets or by air lines). This optimization can optionally note the land prices information.

The geometry and topology data are stored as a set of memory-mapped files allowing processing of very huge amounts of data. The semantic data are stored in a relational database allowing fast data retrieval and miscellaneous search operations. The system can import and export any data in the MapInfo Interchange Format.

The system is written in Borland Delphi 4.0 using BDE as database access middleware and Paradox relational database. Several third-party libraries have been used to provide transformation from one geo coordinate system to another one and to extend the UI with powerful and reach controls.



### Experience – Delivering our Professionalism to Your Needs

SoftAMIS employs the great team of very skilled developers having 7 years of experience in custom software development.

Our company is focused on development of enterprise level custom Java solutions. Despite this, our company is always open for new possibilities and using of new technologies as well as legacy ones.

Our skills include but not limited:

- Computer Languages: Java, C/C++, Delphi, SQL, JavaScript, XML/XSL, HTML / DHTML, UML.
- Libraries and Technologies: J2EE, J2SE, JFC/SWING, JavaPOS, Collections Framework, Security, JDBC, JavaBeans / Bean Context API, RMI, Java 2D, EJB, JTA / JTS, JNDI, JMS, JSP, Java Servlet, JavaMail, CORBA, VCL, MFC, ODBC.
- Middleware, Application and Web Servers: WebGain TOPLink, Hybernate, JBoss, Bea WebLogic Apache Tomcat, Borland AppServer, IBM WebSphere, Microsoft IIS.
- Databases: MS SQL, MySQL, Oracle, Borland InterBase, InstantDB, Cloudscape, and Paradox.
- Platforms: Java2, J2EE, Win 9x, NT, 2000, Sparc Solaris, Linux, and FreeBSD.
- Configuration Management and Version Control Systems: Microsoft Source Safe, Borland StarTeam, and Microsoft Project.
- Development Tools: Borland JBuilder, TogetherJ, Boland Delphi, Borland CBuilder, Microsoft Visual Studio, Rational Rose.

#### Contact SoftAMIS

If you need more information about our company or our services, please contact us using contact information listed below. We will be glad to help you.

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