



WHEN RESULTS MATTER

MODEL-BASED DEVELOPMENT SOLUTION FOR WEB INFORMATION SYSTEMS

NETSILON is a unique solution to streamline the life-cycle of web information systems, and dramatically improve the development productivity. NETSILON supports OMG's Model Driven Architecture™ (MDA™) methodology and provides a comprehensive visual environment.

NETSILON unleashes the power of MDA by fully automating code generation, by applying its concepts not only to the Business Objects & Rules (typically 20% of the application), but also to the Navigation (typically 80% of the application), and by implementing multi-aspect modeling

The NETSILON Methodology sets the stage for best practices and unparalleled productivity

The life-cycle of the application is articulated around a Platform Independent Model (PIM) of the application. The main phases are:

1. **Multi-aspect Modeling:** The three aspects of the PIM are described as models and graphic components:
 - **Business Aspect** : business objects and rules
 - **Navigation Aspect** : the application kinematics
 - **Presentation Aspect** : look-and-feel elements

These aspects are weaved using an action language, and promote Agile Modeling. A continuous checking ensures PIM consistency.

2. **Generation & Deployment:** The compiler automatically converts the PIM into an application coded in the target language and deployed on the target application server and database.
3. **Maintenance & Evolutions:** Implementing functional evolution of the application is as simple as upgrading the relevant aspect of the PIM and generating the new application. Technological modification of the deployment platform only implies generation.

The NETSILON Environment reconciles advanced web technologies and rigorous software engineering

The NETSILON Environment is a comprehensive, visual-driven environment for e-business application automation using MDA concepts and vision. It combines a UML™ modeler and an application generator.

The Business Model Editor allows to graphically describe business entities and constraints as UML class diagrams, and integrate them into the Business Aspect.

The Navigation Model Editor allows to graphically describe zones, dynamic decision centers and integrate them into the Navigation Aspect.

The Web Language Parser allows to import graphic components generated by graphics tools, and integrate them into the Presentation Aspect.

The Action Language Editor features semantic completion and supports a powerful OCL-based action language. The code is compiled on-the-fly during edition, making the code correct by construction.

The Application Generator automates 100% code generation and deployment towards the selected programming language, database and application server.

PRODUCTIVITY

NETSILON introduces a breakthrough in terms of productivity by extending the MDA concept to the Navigation Aspect, typically four times larger than the Business Aspect.

QUALITY

NETSILON ensures consistency and synchronization among the Business, Navigation and Presentation aspects during the complete life-cycle.

WEB PRODUCT LINES

The Business and Navigation Aspects of the PIM are technology neutral high level models. As such, their components -entities and interactions- promote systematic re-use and a product line oriented approach.

COMPETITIVENESS

NETSILON boosts competitiveness by allowing the deliver of high quality applications at a lower cost and with a faster reactivity. Moreover the application owner will benefit from a very low cost of ownership, with very simple maintenance and evolution processes.

ORGANIZATION

The development team is more compact, less technology oriented, and more focus on customer's needs. Moreover the team members can more easily communicate through a higher level reference model.

STANDARDS

NETSILON supports international modeling standards such as UML™, MDA™, OCL and XMI™.

DEPLOYMENT ENVIRONMENT

NETSILON already supports code generation and deployment towards the most popular environments:

Languages: PHP
Java (Servlet, JSP)

Application Servers: PHP servers
J2EE servers

Databases : MySQL
Oracle
PostgreSQL

NETSILON is a product from



info@objexion.com
www.objexion.com