

A professional woman with blonde hair, wearing a beige blazer over a striped shirt, is seated at a conference table. She is holding a white document and looking towards the camera with a slight smile. In the background, two other people are seated at the table, working on documents. The setting appears to be a modern office or meeting room with large windows.

USoft Product Information  
Summary for  
IT Professionals

## USoft Technology Platform Summary for IT Professionals

USoft is a generic design environment for creating data-intensive business applications.

Benefits to customer are:

- Ease of build: few programming skills needed, rapid development.
- Excellent prototyping facilities promoting end user involvement at design time.
- Ease of maintenance resulting in low cost-of-ownership.
- Integration capability of disparate or legacy applications and data sources.

These benefits are achieved through the following technological features:

- Design-time environment based on conceptual declaration, with automatic generation of database structures, C/S and web interfaces, and runtime components. The design-time conceptual layer is based on business rules concepts.
- Runtime rules engine interoperable within a wide range of IT architectures. The rules engine is a software component implementing business logic and responsible for application data integrity.

### Development Environment

USoft uses a central dynamic repository containing data model definitions, business rules, and user interface definitions for Internet, Intranet, client/server and batch environments. Applications are generated from this repository without requiring source code editing or proprietary scripting languages. The repository remains a single point of definition throughout application life cycles and even beyond. It includes authorization information. USoft enables rapid deployment of each solution iteration.

### Integration

USoft is interoperable with other software, such as legacy systems, web sites, content management tools, ERP systems, and B2B communication software. Its Rules-Driven Method Invocation (RDMI) features enables you to call third-party object layers and component ware at the level of individual business rules. This gives you tight, fine-grained integration of USoft and third-party software.

The Active EAI concept within RDMI (not before USoft 6.0) enables you to represent external data sources as if they were USoft database tables. This gives you unparalleled ease of application integration after one-time declaration of external data sources.

USoft's technology platform promotes ease of development and a structured approach:

#### **Flexible Business Rules**

Typically, with USoft you do not translate business logic into low-level Java, Visual Basic or C++ code. Even the more involved rules are specified by setting parameters or by writing standard SQL statements. Besides understanding business rules as a development principle, all that is needed is a firm grasp of SQL. Most importantly, USoft business rules are very easy to maintain and change, even in applications with hundreds of implemented rules. Rule dependencies are traced and adapted automatically.

### **Structured Development**

The development process itself can be documented and traced to any required level of detail: you can record workload, design decisions and their implementations, development priorities, notes and session minutes about every aspect of system design. This information is shared by all team members and truly integrated with the application itself, for instance, through automatic change logging.

### **Manageable Development Content**

UML, ORM and E/R data models can be transferred to and from the USoft repository using point-and-click interfaces. Logical parts of USoft applications can easily be selected for export and import to allow version control, parallel development and use of template applications.

### **Usability**

Wizards help you create data model components. Development efforts for both web-based and Windows environments are greatly expedited by the possibility to run and test instant prototypes built from current repository information. Extensive help facilities are provided. Business logic is expressed mainly in standard SQL statements. These statements are built using simple drag-and-drop facilities, and automatically checked for correctness.

## Runtime Rules Engine

The Business Rules paradigm is powerfully integrated with mainstream IT technologies. The syntax and semantics of rules give you immediate access to both external data and software. This includes calling web services, the import and export of XML or SOAP content, XSL transformations defined with rules, and the deployment of Java and .NET components in rules.

The runtime software delivered by USoft to end users is referred to as the USoft rules engine. The rules engine controls access to business data, guarantees advanced levels of data integrity, and implements associated business logic as a service to a wide range of USoft or non-USoft user interfaces and batch applications.

The USoft rules engine is accessed via USoft web page interfaces, other ASP/JSP server pages, or generally by ODBC/JDBC compliant third party software. It can also be invoked using XML, or act as a SOAP-based web service.

Using a native JDBC driver, the rules engine can be deployed on both Windows XP/Windows 2000 onwards Professional and UNIX-based servers.

The rules engine is set up and can be accessed through a browser-based management console for remote control and tuning.

For web applications, USoft generates web pages that connect to data sources through a thin layer of ASP or JSP call and a USoft runtime component installed on the web server.

In client/server (Windows) applications, the rules engine runs on both the client machines and the server. This keeps network traffic (data and rules transfer) down.

## Supported Technology

### **Supported client platforms**

This section describes supported client platforms for solutions featuring Usoft user interfaces. Usoft generated web pages are run by MS Internet Explorer 5.5 onwards and Netscape 6.1 onwards. Internet Explorer 4.x can be considered with restrictions inherent in this browser version. Usoft Windows applications are typically developed for Windows XP / Windows 2000 onwards. Windows 2000 onwards can also be considered, with restrictions inherent in these platforms. For a Windows client, 32 MB of RAM is required.

### **Supported server platforms**

The rules engine is currently ported to: Windows2000 onwards, RS6000/AIX, Sun/Solaris 6, Sequent, Linux and HP UX. The same applies to Usoft Batch jobs. A browser-based management console for remote control and tuning of the rules engine is included.

In these environments, the Usoft rules engine acts as a server to Usoft-generated interfaces but also to JSP/ASP server pages, MS Visual Studio, COM+ / Component Services, .NET, or the J2EE platform (e.g. EJB).

### **Supported databases**

Supported databases are Oracle versions 10 and 11, MS SQL Server up to and including SQL Server 2008 are supported by Usoft 8, Sybase 11 and higher, Solid Flow Engine 3.7, IBM DB2 and ODBC compliant data source.

### **Supported middleware and third-party integration techniques**

The Usoft rules engine as a client can be made to invoke MS Visual Studio, (D)COM / Component Services, .NET, J2EE components (e.g. EJB) and BEA Tuxedo servers. It also interacts declaratively with any data source approachable through ODBC/JDBC.

As an application server, the Usoft rules engine can be approached by any ODBC/JDBC client including OLE/DB and ASP/JSP server pages, or can be componentized to act as a data manager service within Java-based, (D)COM or .NET based object layers.

Integration details depend on requirements and range from complete online (OLTP) integration with or without transaction control to message-based integration (MSMQ, MQSeries...) and batch-oriented integration (PL/SQL or other proprietary scripting tools, JCS or other batch schedulers, while Usoft also offers a native batch server component).

We also have expertise in connecting with Java-based and (D)COM object layers, CICS databases and SAP (BAPI, JCO, iDoc protocols). Usoft does not include specialized reporting tools as a native feature. We have expertise connecting various reporting tools including Actuate and Oracle Reports.