

XECO DATASHEET



INTRODUCTION

Agility is everything in today's challenging business environment. Cutting costs, adapting one's business model and collaborating with business partners have become essential to staying competitive in a changing businesses environment. Business agility comes from a sound technical architecture and a common set of business building blocks.

zenAptix's Xeco process server provides a comprehensive XML-based technical architecture and a set of common business components. If your requirement is value chain redesign, business process optimization or collaboration with trading partners, Xeco is the standards-based solution. It spans business process design, collaboration agreements, workflow management, data exchange, marshaling of web services and integration with back-office systems, and is designed to support publishing to external repositories. Xeco is also easily deployed, configured and maintained. Its unique design facilitates both on-site and remote administration.

The ebXML technical and common business component specifications are the outcome of the combined efforts of the UN/CEFACT and OASIS groups. Building on the expertise and experiences of EDI, ebXML provides a sound framework for electronic business applicable to enterprises of any size, anywhere, and customizable to the specific business application. Standardization has enabled simple, reliable and re-usable infrastructure that is interoperable, flexible and easily maintained. The unique and innovative Xeco architecture is a lightweight, affordable implementation that fully supports ebXML.



THE XECO BUSINESS PROCESS SERVER

At the core of Xeco is an expert system populated with business process rules derived from UML models and the collaborative protocol agreement details that prescribe the collaboration (business arrangements) between trading partners. With these rules in place, business documents, wrapped in SOAP messages, are passed between trading partners, evaluated and processed. Web services or back-office systems can be accessed to retrieve additional information or used to automatically trigger further processing in complementary systems and business processes.

Xeco enables the automation, integration and optimization of workflow within and between enterprises. As a "process server", it provides all the services to support both inbound

integration with enterprise back-office systems and outbound integration with external Web services and trading partner back offices. Enterprises that use Xeco are able to build and deploy reliable collaborative business solutions that span multiple systems and value chains. Implementation can be either in incremental steps or through radical change. Xeco is able to deliver real benefits within a very short space of time. Changes can be simulated and the best manner of customization determined.

Xeco incorporates the following functionality in support of the ebXML specification:

Business process definitions created in UML

The business rules contained in the Xeco process servers are defined and maintained in UML. This removes the need for familiarity with the ebXML specifications. The output file created by a UML tool such as Rational Rose is converted to an ebXML-compliant business process specification (BPSS) using a fully automated utility. This business process specification is loaded into the Xeco process servers of the collaborating partners. Typically the BPSS is derived from industry best practice (eg Commerce One), but this is not essential, and changes can be made to accommodate any particular need, enabling mass customization.

A business process is redesigned by changing its UML description. Version control is a function of the UML tool selected.

Collaboration between partners based on a formal agreement

Xeco process servers must be configured with the enterprise's Collaboration Protocol Profile (CPP). This CPP is a technical description of the manner in which the enterprise is able and willing to integrate business processes with trading partners, including information such as the transport protocol preference e.g. SMTP, HTTP or HTTPS.

The Xeco process servers also require information about the business-process collaboration. This is contained in the ebXML-specified Collaboration Protocol Agreement (CPA) that describes how the partners will collaborate, naming specific protocols and identifying specific business processes (BPSS) to be followed.

Rules Engine for managing business processes

A rules-based expert system manages actions required during the execution of a business process. It evaluates incoming messages against the facts in the defined business process and the collaborating partner agreements. Events and non-events are monitored and responses generated as prescribed in the BPSS.

BeanStork object mapping technology

EbXML is an evolving specification and therefore regular updates must be accommodated. The Xeco component BeanStork is able to compile new and changed XML schemas into JavaBean™ classes on the fly and then marshal the ebXML business document into a JavaBean™ object. Combined with the Xeco rules engine, this renders the Xeco process server remotely maintainable and makes advances in the specification easy to implement.

Integration to back-office systems and Web services

Xeco provides a framework for the effective activation of appropriate legacy system adaptors for handling business messages. It contains a toolkit to assist system integrators in developing adaptors to integrate messages into back-office systems. A variety of input and output connectors are supported. These connectors are used by external applications that need to invoke a service, communicate with applications involved in the business process and refer events or responses back to the external application.

Message bus framework

Any JMS-compliant messaging layer is supported using the zenAptix messaging bus framework and the zenAptix XML Schema Adjunct framework. Xeco's architecture lends itself to distribution over multiple physical servers, providing for scalability and geographical segmentation.

Management console

Xeco ships with a suite of tools for business analysts, administrators and system integrators to configure and monitor the Xeco server. Functionality includes:

- Server configuration wizard
- Business process conversion tool – converts UML modeled business processes into the business process specification required by ebXML (BPSS)
- Primer – uploads company profiles (CPP's), partnership agreements (CPA's) and business processes (BPSS) to the Xeco server
- System activity monitor – displays a live, interactive view of the Xeco server, showing defined business processes moving through the system
- Log view – provides navigation through the system logs, vital for audit trails of collaborative business processes
- BeanStork – compiles schema instances to JavaBeans™, on the fly.



DEPLOYMENT

Xeco can be used first to simulate proposed changes to business processes and then to identify the most appropriate points of integration in the back-office systems. This simulation is also a mechanism to verify that there is merit in the redesign proposals. Changes can be

accomplished either in small steps or for entire processes. As the value of process redesign or collaboration becomes evident, more processes and trading partners can be included.

An important objective of the ebXML initiative is that it is intended for electronic business between enterprises of any size. Few competing technologies have this as a goal. Xeco is suitable for enterprises, big or small, that use either the most basic or the most advanced technology platforms, with the complexity of business collaboration and system integration reflected in its pricing model.



INSTALLATION AND CONFIGURATION

Installation is straightforward. Configuration can become complex, depending on the number of business partners and business processes to be modeled as well as the level of standardization required of back-office systems.

Briefly, in configuring Xeco the following documents are required:

- the terms and conditions on which your company will conduct business defined in the CPP
- a trading partner agreement (CPA)
- business processes modeled in UML.

Typically, a series of meetings with business analysts/advisors will be necessary to develop the CPP and CPA's and to describe the business processes using UML. The business analysts are expected to identify best practice for the enterprise and be able to customize the business process in a manner that matches the enterprise's business objectives to automate, optimize, collaborate or redesign.



AVAILABILITY

Xeco version 1.1 was first released in November 2001.

A multi-enterprise version, deployable by service providers in a hosted environment, is scheduled for release in 3Q 2002.



SYSTEM REQUIREMENTS

Xeco runs on Unix (Solaris, Linux and Mac OSX) and Windows NT/2000. It requires a SQL database (eg MySQL), an LDAP server (eg OpenLDAP) and Java 1.3. The mail and HTTP

servers require access to default ports. The zenAptix technology is vendor-agnostic. All third-party products can be replaced with a product of choice.