



eXcelon Business Process Manager - First Impression

Author: Dieter E. Jenz

Quick Guide

What it is	Business Process Management System
You would use it for...	Modeling of public business processes and as an execution platform for automated and non-automated processes
... when ...	you are pursuing an integrative business collaboration strategy
Distinctive features	Support for different business collaboration types (industry standards and proprietary standards)
Relationships with other eXcelon products	eXcelon BPM is part of the eXcelon XML platform
Alternative Products	zenAptix Xeco
What to do	Evaluate
Vendor URL	http://www.exln.com

Overview

eXcelon Corp. was very early with the integration of a business process management (BPM) engine into an XML native database. eXcelon Corp. started out in 1988 as a database company under the name Object Design. Over time, the company broadened its focus and initiated a shift towards XML-based middleware and Web services technical infrastructure. At present, some 300 employees are on eXcelon's payroll.

eXcelon markets its solutions worldwide through direct sales channels across North America and a few other industry nations around the globe, as well as through value-added resellers, system integrators, consulting firms and OEM licensees worldwide.

BPM is a business process server, currently at version 2.0.1. It supports various business collaboration specifications, such as the ebXML and RosettaNet specifications.

Concepts and Architecture

eXcelon BPM forms a part of the eXcelon XML platform (version 3.5), together with Extensible Information Server (XIS), a native XML database, and Stylus Studio, an XML-oriented application development tool suite.

eXcelon does not follow the philosophy of clearly distinguishing public and private processes, but positions its BPM product as supporting inter-enterprise as well as intra-enterprise integration. It is capable of handling long-running automated processes that



require no interaction with human users and non-automated processes (human workflow).

Regarding an ebXML-oriented environment, eXcelon BPM sits on top of an ebXML compliant Message Service, which currently supports version 2 of the ebXML Message Service specification. The messaging layer provides for reliable transport and routing.

The ebXML Registry and Repository Service specification has not been implemented yet. Instead, eXcelon BPM uses the XIS implementation or LDAP as base technology, providing access through the Java Naming and Directory Interface (JNDI). eXcelon BPM's directory module represents a superset of an ebXML Registry and Repository implementation in that much more information is stored in the eXcelon directory (e.g. information about backend systems).

The eXcelon business process engine provides flow control over business processes. It is based on eXcelon XIS, which maintains transactional consistency of business documents in pre-parsed XML. The process engine also implements the Business Service Interface (BSI) layer, which executes business transactions. In addition, the process engine initiates the execution of a business activity, which is represented by an application.

eXcelon BPM requires a JDK (1.3), eXcelon's XIS and an LDAP server, if an LDAP server already exists and is to be used for storing information about process participants. eXcelon BPM runs on Windows and on Solaris.

Business Collaboration

As two or more companies intend to collaborate, they go through three stages: 1) Design of Business Processes and creation of CPPs, 2) Negotiation of CPAs with business partners, and 3) Execution of business processes.

Design

eXcelon XML suite comes with Stylus Studio, which is eXcelon's integrated development environment (IDE) for XML-based applications. Stylus Studio includes various plug-in tools, such as an XML Schema Editor, an XML Document Editor, and an XML-to-XML Mapper.

The Stylus Studio plug-in Process Flow Designer (PFD) is used to create and define business process flow definitions as XML documents. The PFD enables a designer to visually define UML activity and state diagrams, as well as create collaboration definitions (a collaboration definition is synonymous with an ebXML Business Process Specification Schema (BPSS)). The import of ebXML business process specification documents in Stylus Studio is not supported yet.

The BPM administrator tool can be used to create collaboration profiles, which are not to be confused with ebXML Collaboration Protocol Profiles (CPPs). An eXcelon Collaboration Profile is stored for each business partner and is not confined to ebXML. Hence, a Collaboration Profile is rather a cross-breed of an ebXML CPP and CPA. However, if ebXML is used, the profile of the business partner is the CPA.



Negotiation

In the current version, eXcelon BPS does not support ebXML compliant CPA negotiation between business partners. Hence, after manual creation/editing, the CPA XML document would be sent to the business partner for approval. Business partners would possibly exchange several versions of a CPA via e-mail.

ebXML has not specified an automated CPA negotiation process yet. An ebXML Working Group sub team has already been chartered with providing a proposal to solve this issue.

Process Execution

As already mentioned, eXcelon BPM is positioned as a platform for the execution of public and private processes. It supports integration with external partners through various B2B collaboration industry standards and proprietary standards, such as RosettaNet, BizTalk, and, of course, ebXML. Hence, eXcelon BPM supports the asynchronous, document-centric nature of business collaboration.

eXcelon BPM interfaces with the ebXML Message Service layer through the ebXML TRP adapter, which implements the Business Service Interface (BSI). It enforces security options as specified in the collaboration profile. The BSI implementation supports sophisticated security options, namely authentication, encryption (privacy), and non-repudiation.

In the current release, eXcelon BPM provides no support for the invocation of business activity implementations wrapped as Web services. An out-of-the-box WSDL/SOAP adapter is planned for the next release.

Administration

eXcelon BPM contains the BPM Administrator that enables a user to manage and monitor the BPM, configure and manage the deployment of business processes, monitor business processes, manage BPM entities (such as participants, groups and nodes) and control security.

Summary

eXcelon Corp. was among the very first vendors to implement ebXML specifications, foreseeing the relevance of the ebXML specifications for interoperable business collaboration. Given the broad support for ebXML among major industry groups, eXcelon is on the right track. eXcelon seems to be fully committed to ebXML, although this doesn't show in the company's marketing pitch, which currently places emphasis on its XIS native XML database product.

The eXcelon XML platform includes all the necessary tools required for business process design, administration and monitoring. In addition, mappings can be defined to translate business documents into a different target format.



eXcelon BPM supports the run-time functional aspects of the ebXML messaging specifications. Conformance with key ebXML specifications varies to some extent. This may be attributed to eXcelon's goal to support multiple business collaboration specifications.

Meeting a basic requirement, eXcelon BPM cleanly separates the modeling environment and the execution environment. Before a process model can be instantiated and executed, it needs to be deployed in the run-time environment.

eXcelon BPM is suited for supporting public and private processes in an inter-enterprise and intra-enterprise environment. It fully supports the asynchronous and document-centric nature of business collaboration. However, a purpose-built Workflow Management System (WfMS) is better suited for private (internal) processes. This may change with a future release, which is expected to include BPML support.

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