



IONA E2A Collaborate - First Impression

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Quick Guide

What it is	Business Process Management Platform
You would use it for...	Modeling of public business processes and as an execution platform for 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 Iona products	IONA E2A Collaborate is part of the Orbix E2A Web Services Integration Platform
Alternative Products	BEA WebLogic Collaborate, IBM WebSphere Business Integrator, Peregrine Alliance Manager
What to do	Evaluate
Vendor URL	www.iona.com

Overview

IONA positions itself as an e-Business Platform provider for Web Services integration. Founded in 1991 and headquartered in Dublin, Ireland, IONA has grown into an internationally operating company with offices around the globe.

In February 2002, IONA announced the availability of its Orbix E2A Web Services Integration Platform, a member of the IONA Orbix E2A Suite (with Orbix E2A Application Server Platform being the other member). The Web Services Integration Platform comprises three editions:

- XMLBus Edition
- Collaborate Edition
- Partner Edition.

IONA's Web Services Integration Platform supports several standards including ebXML, RosettaNet, cXML, xCBL, and EDI. Adapters are provided for technologies, such as Corba, J2EE, JMS and IBM's MQSeries. In addition, IONA has adapters for application systems from popular vendors, such as SAP, PeopleSoft and Siebel. Most of the technology was obtained through the acquisition of Netfish in 2001. Netfish developed XDI suite, an XML-based B2B integration technology.

In the context of this product overview, we focus on the E2A Collaborate Edition. E2A Partner Edition is positioned as the Trading Partner component for small-to-medium enterprises as well as a low-end connectivity product that may be up-sold and replaced



by E2A Collaborate. It allows business partners who employ the XDI Server (included in E2A Collaborate) to exchange business documents across the Internet. The XMLBus Edition offers Web services infrastructure and a platform for Web Services development, deployment, integration and management.

Concepts and Architecture

The core of IONA's Web Services Integration Platform is messaging between disparate applications. As such, the product suite has strong roots in the application integration space, making it technically suitable for inter-enterprise application integration, since it uses SOAP over HTTP as native message mechanism.

E2A Collaborate consists of B2B Integrator, Enterprise Integrator and XMLBus. B2B Integrator Core comprises three components: XDI Server, XDI Monitor and XDI Developer Suite.

The XDI Server serves as the command and control hub for an organization and works in coordination with other XDI Servers, XDI Partner and third-party B2B solutions. It manages the translation, processing, and secure and reliable delivery of business documents (business objects) between business partners. In addition, XDI Server provides management of business partners (trading partners), users, mailboxes and repositories.

XDI Server can be run in Server or in pHub (Process Hub) mode. In pHub mode, multiple business partners can physically share an XDI server. pHub mode facilitates inter-enterprise business processes, since it can interpret and transform business documents into a format that the intended recipient can understand. In contrast, in Server mode, collaborating business partners must be able to understand the same business document format.

IONA pursues a Java-based strategy and supports third-party products. XDI Server requires a JDK (1.3), an Oracle8 DBMS, and an application server (either Iona Orbix E2A Application Server, BEA WebLogic 6.1, or IBM WebSphere 4.0).

XDI Server supports multiple business collaboration protocols: xCBL, cXML, RosettaNet, and ebXML. However, at present, support for ebXML is limited. Implementations of current version 2 level ebXML technical infrastructure specifications are not available yet.

XDI Monitor allows a business partner to monitor its own business processes. It provides process, task and system events logs for tracking and debugging purposes. XDI Monitor and XDI Server communicate via HTTP.

The XDI Developer Suite is a tool set for defining business processes, XML schemas, XML documents, XML transformations and so on. The suite contains purpose-built editors for the various resource types.

The Enterprise Integrator includes the Enterprise Integrator Workbench, a design-time tool, which is used to define flows that integrate applications and connect integration objects. Prominent integration objects are message definitions that describe the data of the source and target applications, transformer definitions that convert the data from one application to another, and adapters, that connect and communicate between Enterprise Integrator and the source and target applications. Enterprise Integrator supports a whole



batch of adapter families, including RDBMS adapters (e.g. Oracle), Message Queuing protocol adapters (e.g. MQSeries), and application systems adapters (e.g. SAP, PeopleSoft).

Business Collaboration

As two or more companies intend to collaborate, they generally 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

The XDI Processflow Editor lets a designer create and configure business process (processflow) definitions. A processflow definition consists of a sequence of tasks (activities) that define the data flows between subsystems in the XDI server. It also defines how business transactions are integrated with private processes. Each task can include adapters, e-mail, conditional branching, mappings, and RosettaNet PIPs, and others.

IONA uses proprietary syntax for the definition of business processes. UML use case and activity diagrams are not supported yet. Process definitions are represented as XML documents.

The Developer Suite provides the functionality to generate a Web service definition (WSDL file) from a business process definition. Document style is the usual choice unless the process accepts input parameters.

Trading Partner Profiles (similar to ebXML CPPs) can be defined and stored in the resource library. Each business process needs to be associated with a Trading Partner Profile. Hence, a trading partner profile also conceptually fills the role of an ebXML CPA.

Negotiation

In the current version, E2A Collaborate provides basic support for the exchange of business processes between business partners, provided that XDI Server is installed. E2A Collaborate does not support a defined negotiation and approval process for business processes, which requires both partners to explicitly approve a public business and to activate it (after approval).

Process Execution

IONA E2A Collaborate is clearly positioned as a platform for inter-enterprise application integration. The XDI pHub architecture consists of the Process Integration Engine and XDI Partner, which includes advanced security features. Each of these components can be customized to provide complete integration with ERP systems.

The XDI pHub provides the capability to validate business documents and include business rules that control how these business documents are exchanged between collaborating business partners.



The XDI pHub supports data security at the transport layer through SSL and at the business collaboration protocol level through digital signatures and encryption.

Administration

XDI Monitor allows administrators to view, monitor, suspend, stop, and restart currently executing business processes, including public business processes. XDI Monitor provides a visual representation of the status of a business process instance.

A Web-based monitor (Web Monitor) is also available. It provides limited functionality in that it does not allow an administrator to control business process instances, but only view current and historic activity.

Summary

E2A Collaborate is a comprehensive solution with strong integration features. It is a suitable solution for inter-enterprise business process integration where support for multiple business collaboration protocols and business document transformation is required. It fully supports the asynchronous and document-centric nature of business collaboration. Organizations participating in complex business collaborations (net market) can generally retain their existing infrastructure.

As a platform for inter-enterprise application integration, E2A Collaborate does not support human workflow. The E2A Collaborate platform includes all of 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.

At present, IONA's support for RosettaNet-based business collaboration is more advanced than that for ebXML-based collaboration. However, like many of its competitors, IONA is working on an ebXML Message Service version 2 compliant implementation, which forms a key component of an ebXML-based technical infrastructure. A release date has not been specified yet.

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