

BEA WebLogic Collaborate

A Component of BEA WebLogic Integration

Glossary

BEA WebLogic Collaborate Release 2.0 Document Edition 2.0 July 2001

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BEA WebLogic Collaborate Glossary

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Glossary

This glossary defines terms that are used in the documentation for BEA WebLogic CollaborateTM and BEA WebLogic Process Integrator.TM Italic indicates terms that are included in this glossary. For definitions of BEA WebLogic ServerTM terminology, see the WebLogic Server Glossary at the following URL:

http://e-docs.bea.com/wls/docs60/glossary/index.html

access control list (ACL)

Data structure used to authorize or deny access to resources by principals. Human users of WebLogic Collaborate can be authorized to access three types of resources: Java Server Pages (JSPs) for administrative and configuration purposes; administration consoles; and the JDBC connection pool. You can authorize trading partners to access the transport servlet and the WebLogic Server JDBC connection pool. WebLogic Collaborate is authorized to access the transport servlet.

ACL

See access control list (ACL).

action

Basic unit of work performed by WebLogic Process Integrator. Actions define workflow and task behavior, and can be defined as part of tasks, decisions, and events. Numerous actions are shipped with WebLogic Process Integrator.

Administration Console

See WebLogic Collaborate Administration Console and WebLogic Server Administration Console.

Apache XML Parser

Third-party parser, provided by the Apache Software Foundation, that implements the W3C XML, DOM, and SAX standards.

attachment

Information that is sent with a business message.

authentication

Process by which WebLogic Collaborate establishes the identity of a principal.

authorization

Permission granted to WebLogic Collaborate principals to access certain resources.

Trading partner authorization is a role-based security feature whereby a trading partner is allowed to send and receive certain types of messages as defined by the trading partner's subscription in a specific conversation. Trading partners are authorized to access the transport servlet and the JDBC pool.

Human users can be authorized to access JSPs and, indirectly, the JDBC pool. A WebLogic Server access control list (ACL) can be configured selectively to allow or deny a user access to a resource.

WebLogic Collaborate is authorized to access the transport servlet in order to send messages to trading partners.

B₂B

See business-to-business (B2B) e-commerce.

browser client

Trading partner that uses a Web browser to communicate with other trading partners.

BTP

See business transaction protocol (BTP).

Bulk Loader

WebLogic Collaborate utility that exports repository data to an XML file, imports XML data into the repository, and deletes data from the repository. The Bulk Loader can also be used to migrate repository data from one environment to another; for example, from one supported database to another. The Bulk Loader supports several JDBC databases.

business document

XML part of the payload of a business message.

business message

Basic unit of communication exchanged between trading partners in a conversation. A business message is a multipart MIME message that consists of business documents, attachments, and message headers.

business operation

Method of adding user-defined operations in WebLogic Process Integrator by invoking EJBs or calling Java classes.

business protocol

Set of rules that governs the electronic exchange of business information between enterprises across a network. A business protocol specifies the structure of business messages, how to process the messages, and how to route them to the appropriate recipients. WebLogic Collaborate trading partners can use the XOCP, RosettaNet, and cXML business protocols to send and receive business messages.

business protocol definition

Set of logic plug-ins that implements a business protocol.

business service

Interface to a conversation definition. A trading partner offers a business service to other trading partners who may want to interact with the trading partner that is offering the business service.

business-to-business (B2B) e-commerce

The practice of buying and selling among companies through electronic transactions.

business transaction protocol (BTP)

Standard that provides an open and well-defined method for managing long-running, complex transactions common in B2B e-commerce. BTP is an XML-based vocabulary protocol for representing and seamlessly managing complex, multistep B2B transactions over the Internet. BTP enables trading partners to manage complex XML message exchanges as long-running, loosely coupled conversations.

certificate authenticator

Standard interface defined in WebLogic Server to map digital certificates to WebLogic Server users. After verifying an incoming certificate, the certificate authenticator maps the incoming trading partner associated with the certificate to the corresponding WebLogic Server user, based on the certificate.

certification authority

Well-known and trusted organization, such as VeriSign, that issues digital certificates for the purpose of authenticating a certificate holder's identity to another party.

chain

Multiple logic plug-ins that share the same business protocol and are processed in a predefined sequence at run time. A router consists of multiple router logic plug-ins and a filter consists of multiple filter logic plug-ins. In other words, router logic plug-ins form one chain, and filter logic plug-ins form another chain.

WebLogic Collaborate executes each router logic plug-in as a business message passes through the router. Similarly, WebLogic Collaborate executes each filter logic plug-in as a business message passes through the filter. In other words, the logic plug-ins in the router chain are executed before the logic plug-ins in the filter chain.

After one logic plug-in has been executed, the next one in the sequence (in the chain) is activated. Each successive logic plug-in can access the shared message information as the business message passes through WebLogic Collaborate. A logic plug-in can modify or override the changes made by preceding logic plug-ins in the chain.

If logic plug-ins are supplied by a customer, they must be part of a router logic plug-in chain or a filter logic plug-in chain, even if they do not perform routing or filtering functions.

cluster

Group of servers that work together to provide an application platform that is more powerful and reliable than a single server. A cluster appears to its clients as a single server but it is, in fact, a group of servers acting as one. If properly designed and configured, a cluster can provide both availability and scalability. Furthermore, it should be possible to dynamically add new processes and machines to a cluster to handle increased load without shutting down the cluster. It should also be possible to remove individual servers from the cluster, periodically, in order to perform maintenance.

collaboration agreement

Definition of the interactions that trading partners agree to carry out, along with a specification for the methods through which these interactions are conducted. This specification includes details about transport, messaging, security constraints, and bindings to a process specification.

collaborative workflow

Workflow used by WebLogic Collaborate to implement a role.

CollaboratorMBean

MBean interface that represents trading partners in a run-time environment. WebLogic Collaborate management applications can use CollaboratorMBean objects to monitor trading partners.

commerce XML (cXML)

A business protocol for the consistent exchange of business documents between procurement applications, e-commerce networks, and suppliers.

Confirmed_Delivery_to_Destination

Quality of Service (QoS) option that verifies receipt of a message by all recipient trading partners. Delivery can be made more reliable by use of options such as Retry Attempts and Durability (Persistent option).

Confirmed_Delivery_to_Destination can also provide additional information to the sender and administrators, including delivery status from recipients, complete message tracking for administrators, and confirmation from WebLogic Collaborate upon completion of delivery. Availability depends on the business protocol that is used.

Confirmed_Delivery_to_Hub

Default Quality of Service (QoS) option that verifies receipt of a message by WebLogic Collaborate. This option is often used when system performance is an issue. It does not provide delivery status from recipients, nor does it provide message tracking. Because the selection process for trading partners is performed after confirmation reaches the sender, no information about potential recipients is available. Availability depends on the business protocol that is used.

Confirmed Routing

Quality of Service (QoS) option for XOCP that verifies delivery when a message reaches the router component. This option provides a list of the trading partners selected by the router to receive the message. The administrator for the sending

trading partner receives message tracking information repeatedly until the message reaches the router. Availability depends on the business protocol that is used.

conversation

Series of message exchanges between trading partners. A conversation is defined by a collaboration agreement. The choreography of the message exchanges is determined by the conversation definition, which is part of the collaboration agreement.

conversation coordinator

Service that manages conversation life cycles, according to the rules of the corresponding business protocols, and supports long-living, durable conversations that span multiple organizational boundaries. The conversation coordinator generates conversation IDs; registers trading partners in a conversation; delivers business and system messages to clients; maintains status information about conversations; and provides the conversational context for execution of the business protocol.

conversation definition

Collection of values that defines a conversation.

ConversationHandler

Interface that enables a trading partner to send and receive business messages in conversations. A conversation handler must be registered for one or more conversation types in order for the associated trading partner to participate in conversations.

conversation initiator

Trading partner that initiates and terminates a conversation.

conversation life cycle

The period during which messages are exchanged between trading partners.

ConversationMBean

MBean interface that represents a conversation. WebLogic Collaborate management applications use ConversationMBean objects to monitor conversations in a run-time environment.

conversation participant

Trading partner that receives and processes business messages.

conversation termination

Intelligent and controlled cessation of message exchanges performed by WebLogic Collaborate or WebLogic Process Integrator. For WebLogic Process Integrator clients, a conversation is terminated when the conversation initiator reaches a done state, as defined by the conversation termination property (Success or Failure) for the done node. A conversation participant can end its own participation in a conversation, but only conversation initiator workflows can terminate a conversation. For WebLogic Collaborate clients, conversation termination is initiated by the Conversation.terminate() operation, which is performed by the conversation initiator. As a result of this operation, each conversation participant receives a ConversationHandler.onTerminate() message.

Correlation ID

Quality of Service (QoS) option that contains the message identification string. It can be used to correlate different business messages within an application. Availability depends on the business protocol that is used.

cXML

See commerce XML (cXML).

cXML filter

A logic plug-in chain that consists of the following logic plug-ins in this order:

- (1) cXML filter logic plug-in, which is provided by WebLogic Collaborate; and
- (2) optional customer-supplied logic plug-ins.

cXML filter logic plug-in

A logic plug-in that determines which cXML business messages a trading partner will receive. The cXML filter logic plug-in is one of the logic plug-ins in the cXML filter.

cXML router

A logic plug-in chain that consists of the following logic plug-ins in this order:

- (1) cXML router logic plug-in, which is provided by WebLogic Collaborate;
- (2) optional customer-supplied logic plug-ins; and
- (3) cXML router enqueue logic plug-in.

cXML router enqueue logic plug-in

A logic plug-in that queues a cXML message for potential delivery to a recipient.

cXML router logic plug-in

A logic plug-in that assigns the recipient for a cXML message.

data privacy

WebLogic Collaborate SSL-based security feature that provides link-level encryption of messages in communications between trading partners. Human users do not have data privacy (SSL) when user names and passwords are used for identification. A digital certificate is required to provide data privacy.

data universal numbering system (DUNS)

Standard for assigning nine-digit strings, as internationally-recognized identifiers, to companies that engage in global electronic commerce transactions. Business identifiers are assigned to trading partners for external use by some business protocols; they differ from internal WebLogic Collaborate trading partner names. Implementations of the RosettaNet business protocol must use DUNS numbers. Implementations of the cXML or XOCP business protocols have the option of using DUNS numbers.

decision

WebLogic Process Integrator term for a workflow component that contains a condition to be evaluated when a transition occurs. The result of the evaluation is either true or false, and it determines the appropriate dependent node to which subsequent flow control passes.

decoder

Component that processes the protocol-specific message headers, identifies the sending trading partner, enlists the sending trading partner in a conversation, prepares a reply for the sender, and forwards the message to the scheduling service.

deferred synchronous message delivery

Message delivery method whereby control is returned to the application once a message is sent. A message token is returned to the application, which the application can access later to check the status of message delivery. After the token is accessed, the application waits for a specified time or until one of the

following events occur: acknowledgments are received from all potential destinations; the message times out; or the conversation in which the message was sent terminates.

delivery channel

Specification for delivering business messages to one trading partner. Each trading partner has a delivery channel for each business protocol that the trading partner supports.

digital certificate

Digital equivalent of an ID card that WebLogic Collaborate uses, with a public key encryption system, to authenticate trading partners. The digital certificate contains the owner's public key, which has been digitally signed by a certification authority.

digital signature

Security feature that establishes the identities of communicating entities. A digital signature can be trusted only to the extent that the public key used to verify the digital signature can be trusted.

document definition

Schema, such as a document type definition (DTD), that specifies the prerequisites for a valid document. WebLogic Collaborate document definitions are provided in XML DTDs. Each document definition includes two attributes: System ID (a DTD system identifier); and URL, which specifies the location of the document definition.

document exchange

Definition of the method through which a document is exchanged. A document exchange defines a business protocol and some run-time parameters.

document type definition (DTD)

File that specifies the format (grammar and syntax) to be used for associated XML messages or XML files.

done

WebLogic Process Integrator term for a workflow component that marks an entire workflow as complete. No further processing for any task occurs after this term is issued.

DTD

See document type definition (DTD).

DUNS

See data universal numbering system (DUNS).

Durability

Quality of Service (QoS) option that specifies whether a durable message store is used to guarantee message delivery in case of node failures. The options are Nonpersistent (default) and Persistent. Availability depends on the business protocol that is used.

ebXML

See electronic business XML (ebXML).

EDI

See Electronic Data Interchange (EDI).

EDI VAN

See Electronic Data Interchange Value-Added Network (EDI VAN).

electronic business XML (ebXML)

Set of specifications for a modular electronic business framework. ebXML is a joint initiative of the United Nations (UN/CEFACT) and OASIS, developed for global usage.

Electronic Data Interchange (EDI)

Standard that specifies the format of business messages for electronic commerce. EDI describes the contracts that define the legal terms and conditions as well as technical specifications to which trading partners must adhere in order to conduct electronic commerce.

Electronic Data Interchange Value-Added Network (EDI VAN)

Third-party intermediary that routes EDI messages between trading partners.

end point

URL for a trading partner.

encoder

Component that transforms a message, as necessary, to support the required business protocol, and then forwards the message to the transport service.

event node

WebLogic Process Integrator term for a workflow component. To execute an event node, the workflow waits for an XML message to trigger the event. When that trigger occurs, various sub-actions defined within the event node can be executed and/or workflow variables can be set.

extended property

User-defined element, attribute, or text that can be associated with entities in the repository. For this release, extended properties can be associated with trading partners only, through the *WebLogic Collaborate Administration Console* or the Bulk Loader utility. These properties provide application extensions to the standard predefined attributes of trading partners. XPath routing expressions and XPath filtering expressions can reference these extended properties.

extensible markup language (XML)

Subset of SGML that is rapidly becoming a universal standard for defining, validating, and sharing data formats and documents. Because XML is text-based (that is, it is not written in binary format), and it uses syntax rather than binary markers to organize data, it can be deployed across heterogeneous and potentially incompatible systems and platforms. Its extensibility derives from markup symbols that are unlimited and self-defining, unlike those of HTML. Like HTML, XML can describe how a file is displayed. Unlike HTML, XML enables you to specify how a file is displayed. XML is a crucial component of the WebLogic Collaborate solution.

extensible open collaboration protocol (XOCP)

Default business protocol used by WebLogic Collaborate. Trading partners can use XOCP to send and receive message. XOCP provides support for conversation life cycle tracking, dynamic routing of messages, and the management of business interactions.

extensible style sheet language (XSL)

Language for specifying the format of an XML document.

failover

Transfer of control to a backup component when a fault occurs.

file-sharing client

Trading partner that uses FTP to communicate with other trading partners.

filter

Set of one or more logic plug-ins for a specific business protocol. A filter determines which messages a trading partner will receive. WebLogic Collaborate provides an XOCP filter, a RosettaNet filter, and a cXML filter.

filter chain

See chain.

filtering expression

XPath expression in an XOCP filter logic plug-in.

filter logic plug-in

A logic plug-in in a filter. See RosettaNet filter logic plug-in, XOCP filter logic plug-in, and cXML filter logic plug-in.

GlobalConversationMBean

MBean interface that represents a conversation definition. WebLogic Collaborate management applications use GlobalConversationMBean objects to monitor conversations in a run-time environment.

HTTP proxy

Intermediary that represents the Internet for outgoing HTTP requests and represents many IP destinations for incoming requests.

hop timestamp

Facility through which each message in WebLogic Collaborate is time-stamped upon its arrival at WebLogic Collaborate. No input is required from the application. A timestamp can be useful for debugging and measuring performance. Availability depends on the business protocol that is used.

intended recipient XPath routing expression

XPath expression that specifies the initial list of recipient trading partners for a message. An intended recipient XPath routing expression is part of the XOCP router logic plug-in, is dynamically specified by the sending trading partner, and can support references to extended property in the message-context XML

document that is generated for the message. Intended recipient XPath routing expression specifications can be modified or overridden by trading partner XPath routing expressions and WebLogic Collaborate XPath routing expressions.

Java Management Extensions (JMX)

Basis of the WebLogic Collaborate administration API. JMX, which is published by Sun Microsystems, Inc, is the standard API for management applications.

JMX

See Java Management Extensions (JMX).

join

Term for a workflow component that links WebLogic Process Integrator events, tasks, and decisions, thus controlling the transitions between them. Joins can be AND or OR. If the join is an AND, all components linked by it must be satisfied before the successor to the join can be activated. If the join is an OR, only one of the components linked by that join must be satisfied in order to activate the successor to the join and continue the flow.

large message support

Feature that enables the WebLogic Collaborate administrator to specify that all messages above a certain size be stored on disk rather than in memory, which is the default location. Unless otherwise specified, a message must be at least 3 kilobytes long to qualify for large message support.

logging

See log message and system log message.

logic plug-in

Value-added software that is installed on WebLogic Collaborate to provide additional processing of the information that passes through WebLogic Collaborate, and that is subject to guidelines and interfaces imposed by WebLogic Collaborate. WebLogic Collaborate provides router logic plug-ins and filter logic plug-ins for each business protocol that it supports.

WebLogic Collaborate customers can provide additional functionality by creating custom logic plug-ins that conform to the standards for the business protocol that is being used. Customer-provided logic plug-ins can provide functionality other than routing and filtering, such as billing. See cXML filter logic plug-in, cXML router logic plug-in, RosettaNet filter logic plug-in, RosettaNet router logic plug-in, XOCP filter logic plug-in, and XOCP router logic plug-in.

logic plug-in chain

See chain.

log message

Notification of a particular occurrence that is recorded in the local log. WebLogic Collaborate generates four different types of log messages based on the level of severity of the occurrence being reported: fatal, error, warning, and info. The log contains the complete message and the timestamp.

managed bean (MBean)

Java object (JavaBean) that, as part of the Instrumentation level in JMX architecture, contains attributes for management operations. In WebLogic Collaborate, MBean classes are used to monitor run-time information. MBeans are registered with the MBean server that runs inside WebLogic Collaborate. When MBeans are created, their attributes are populated from the repository. At run time WebLogic Collaborate updates MBean attributes to reflect the state of the running system. MBeans are implemented as Standard MBeans; that is, each class implements its own MBean interface. See CollaboratorMBean, ConversationMBean, and GlobalConversationMBean.

MBean

See managed bean (MBean).

message

See business message, log message, system log message, system transport message, and transport message.

message context

Information that enables recipients of a message to determine the structure and content of the message, as well as the conversation in which the message was sent. Specifically, the message context identifies the following: the relevant conversation, the message definition, the message parts, a content-type for each message part, and a document definition for each message part.

message-context XML document

File containing data used by XPath routing expressions and XPath filtering expressions to identify the trading partners intended to receive a message. A file of this type is generated by WebLogic Collaborate from each XOCP message and associated information in the repository. A message-context XML document contains information carried in the message header and payload. Because a

message-context XML document contains XPath expressions, and because XOCP is the only business protocol that supports XPath, XOCP is the only business protocol that uses message-context XML documents.

message definition

Specification of the business content, or payload (business documents and attachments) of a business message. A message definition consists of ordered message parts, the contents of which may be binary or XML. An XML message part defines a business document and requires a document definition. A binary message part defines an attachment and requires no other information.

message delivery method

See deferred synchronous message delivery and synchronous message delivery.

message envelope

Container for a business message as it travels through WebLogic Collaborate. As the business message enters WebLogic Collaborate, WebLogic Collaborate creates a message envelope for each intended recipient. In addition to the business message, the message envelope contains high-level routing and processing information, such as URLs for the sender and the recipient.

message filtering

Process used for one of several purposes: to restrict the type of messages received by a specific trading partner through the use of routers and filters; to restrict messages to a specified set of trading partners; or to implement matching algorithms so that information flows to the correct trading partners. See also logic plug-in.

message header

Part of a business message that contains attributes, such as information that identifies the sender and recipient, the conversation, and the Quality of Service (QoS).

message manipulator

Java class that implements the message manipulator interface com.bea.b2b.wlpi.MessageManipulator and that helps integrate WebLogic Collaborate and WebLogic Process Integrator. A message manipulator uses WebLogic Process Integrator variables to create and process WebLogic Collaborate business messages.

message token

Token that is returned to an application after the application sends a message. The token provides the following information: the message ID; the ID of the conversation in which the message was sent; whether the message was sent successfully; the amount of time that elapsed before all recipients sent acknowledgments, if the Quality of Service (QoS) delivery option allows this information to be sent; the number of recipient destinations after the initial selection (router specifications applied); and the number of recipient destinations after the final selection (filter specifications applied).

message tracking

Feature that provides information about the status of a message as the message progresses through various predefined message-tracking locations in the WebLogic Collaborate messaging system. WebLogic Collaborate administrators can use message-tracking information for debugging and to identify bottlenecks in the system. The availability of message-tracking locations depends on the configuration of the WebLogic Collaborate system, the Quality of Service (QoS) for the message, and the business protocol.

metadata

Data used to indicate the purpose, meaning, or location of other data. Database schemas and XML DTDs are examples of metadata.

multicast

Broadcast of an XOCP message from one trading partner to many trading partners.

Nonpersistent

Default Durability Quality of Service option whereby a message is not stored anywhere in the WebLogic Collaborate system. The message is not recoverable in the event of a whole or partial system failure that occurs while the message is enroute to its destination. Messages delivered with this option use fewer system resources and thus provide better throughput.

nonrepudiation

Mechanism that provides legal proof that a message was sent or received. Nonrepudiation of origin provides legal proof that a message was sent; it links a received message to the sender of the message. Nonrepudiation of receipt provides legal proof that a message was received; it links a processed message to the recipient of the message.

OASIS

See Organization for the Advancement of Structured Information Standards (OASIS).

OBI

See Open Buying on the Internet (OBI).

Open Buying on the Internet (OBI)

A consortium of companies, including BEA Systems, that develops and deploys open, platform-neutral standards for Internet-based procurement.

Organization for the Advancement of Structured Information Standards (OASIS)

International consortium dedicated to the rapid adoption of product- and platform-independent formats based on public standards, such as XML. OASIS operates www.xml.org, a site that offers resources, and that functions as a repository for XML specifications, such as vocabularies, DTDs, schemas, and namespaces.

parser

See Apache XML Parser.

partner interface process (PIP)

One of a set of RosettaNet protocols that specify the choreography of messages. A PIP is the RosettaNet equivalent of a conversation definition.

party

Entity that binds a role in a conversation definition to a trading partner in a collaboration agreement.

payload

Business content of a business message, consisting of one or more business documents and attachments.

Persistent

Durability Quality of Service option whereby a message is stored at, and forwarded from multiple locations between its source and destination, during the course of its delivery, as a safeguard in case of machine failures. This process is called persisting a message. An application can direct the system to persist messages on a per-message or per-conversation basis. However, WebLogic

Collaborate must be recoverable in order for the message to persist. Persistence is achieved at the expense of system throughput. A persistent message travels more slowly and consumes more resources than a message that is Nonpersistent.

PIP

See partner interface process (PIP).

plug-in

See logic plug-in and WebLogic Process Integrator plug-in.

principal

Entity that requires access to the WebLogic Collaborate system. Principals include trading partners, human users, and WebLogic Collaborate.

private process

Business process conducted within a business organization. The definitions and designs for a private process are specific to the organization and are not visible outside it. A private process can interface with public processes and with back-end business systems.

Process Engine

Run-time component of WebLogic Process Integrator that monitors and controls workflows.

public process

Business process conducted between trading partners. A public process is part of a formal contract between trading partners that specifies the content and semantics of message interchanges between them. When the RosettaNet business protocol is used, the business process is a partner interface process (PIP). For all business protocols, a public process is implemented by means of collaborative workflows.

QoS

See Quality of Service (QoS).

OPA

See Query for Price and Availability (QPA).

Quality of Service (QoS)

WebLogic Collaborate class of options that WebLogic Collaborate uses to define levels of reliability in message delivery. QoS provides options for reliable delivery of messages in the event of network-link and node failures. WebLogic Collaborate uses options that improve reliability by using a persistent data store that enables WebLogic Collaborate to recover in case of node failures.

Query for Price and Availability (QPA)

Message that is broadcast to one or more supplier trading partners, who respond to the buyer trading partner with quotes.

realm

Domain for a set of security features that provide access to ACLs, names of principals, and related security services. The realm provides a context in which the range of security operations and other security-related information governing WebLogic Collaborate users is defined. It determines how users are authenticated. The security features available for WebLogic Collaborate are built on the security functionality provided by WebLogic Server.

recovery

Restoration of a system to the most recently committed and consistent state.

registration

Request by a trading partner to receive business messages for a given role in a conversation definition. Registration requests are sent to WebLogic Collaborate and require the trading partner to have a subscription.

reliable messaging

Process of delivering messages with various Quality of Service (QoS) options that guarantee the safe arrival of those messages at their destinations, even when machine failures occur. When reliable messaging is used, the following functionality is available: confirmation of receipt of messages; message logging and tracking; correlation of messages; retry attempts; and a choice of message delivery methods.

repository

Database in which the following types of information are stored: trading partners, conversations, document definitions, XML schemas, and XSLT mappings. The primary store is a relational database accessed through JDBC. The repository can

be configured and accessed through an HTML interface, the *WebLogic Collaborate Administration Console*. The Bulk Loader utility supports the updating and processing of repository data, and the deletion of data.

restricted trading partner

Trading partner that runs a license-restricted version of WebLogic Collaborate.

Retry Attempts

Quality of Service (QoS) option whereby WebLogic Collaborate attempts to resend a message a specified number of times at any delivery point in order to mask intermittent network failures. WebLogic Collaborate waits for a predefined interval before attempting to resend a message. Availability of this option depends on the business protocol that is being used.

RNIF

See RosettaNet Implementation Framework (RNIF).

role

In WebLogic Collaborate, a role is a definition of activities, such as buying and selling, that can be performed by a trading partner during a conversation. A role is defined in terms of the documents that can be sent or received by a trading partner in the conversation. Each conversation has two or more roles, and each role is defined by a collaborative workflow.

In WebLogic Process Integrator, a role is one of the following: an area of responsibility, an ability, or an authorization level that is shared by a group of users. A user can belong to one or more roles.

RosettaNet

- (1) Non-profit consortium of high-technology companies whose purpose is to define and standardize business interfaces for e-commerce.
- (2) Business and transport protocol specified by the RosettaNet consortium.

RosettaNet filter

A logic plug-in chain that consists of the following logic plug-ins in this order:

(1) RosettaNet filter logic plug-in, which is provided by WebLogic Collaborate; and (2) optional customer-supplied logic plug-ins.

RosettaNet filter logic plug-in

A logic plug-in that determines which RosettaNet business messages a trading partner will receive. The RosettaNet filter logic plug-in is one of the logic plug-ins in the RosettaNet filter.

RosettaNet Implementation Framework (RNIF)

Guidelines for creating interoperable software application components that execute PIPs.

RosettaNet router

A logic plug-in chain that consists of the following logic plug-ins in this order:

- (1) RosettaNet router logic plug-in, which is provided by WebLogic Collaborate;
- (2) optional customer-supplied logic plug-ins; and
- (3) RosettaNet router enqueue logic plug-in.

RosettaNet router enqueue logic plug-in

A logic plug-in that queues a RosettaNet message for potential delivery to a recipient.

RosettaNet router logic plug-in

A logic plug-in that assigns the recipient for a RosettaNet message. Unlike XOCP and cXML, RosettaNet enables a trading partner to send only one message to one trading partner at a time. Therefore, the RosettaNet router logic plug-in assigns only one recipient.

router

Set of one or more logic plug-ins for a specific business protocol. A router determines the trading partners to which a message is sent. WebLogic Collaborate provides an XOCP router, a cXML router, and a RosettaNet router.

router chain

See chain.

router logic plug-in

A logic plug-in in a router. See cXML router enqueue logic plug-in, cXML router logic plug-in, RosettaNet router enqueue logic plug-in, RosettaNet router logic plug-in, XOCP router enqueue logic plug-in, and XOCP router logic plug-in.

routing expression

XPath expression in an XOCP router logic plug-in.

routing service

WebLogic Collaborate component that provides a list of recipients for a message, performs the final validation of message recipients, and stores the message for delivery to trading partners.

scheduling service

WebLogic Collaborate component that helps ensure proper routing, queuing, and sequencing of messages.

secure sockets layer (SSL)

Internet transport security protocol that provides data privacy between applications. In WebLogic Collaborate, two-way SSL requires digital certificates from both communicating applications.

security

Set of mechanisms available to prevent corruption or theft of data. See authentication, authorization, data privacy, and secure sockets layer (SSL).

shape

Graphical representation, in the WebLogic Process Integrator drawing area, of a workflow node.

SSL

See secure sockets layer (SSL).

start

First component of a workflow. The triggering properties of the workflow are specified in the start node. The first shape after the start node is the first active component in the workflow.

subscription

Permission for a trading partner to participate in a specific role in a specific conversation definition. To send business messages for a role in a conversation, a trading partner must have a subscription to that role. To subscribe, a trading partner must specify its own name, the name and version of the desired conversation, and the role to which the trading partner is subscribing.

supply chain

Sequence of processes for producing, shipping, and distributing products.

synchronous message delivery

Message delivery method whereby WebLogic Collaborate returns control to the application once the outcome of the message transmission is known. Control is returned to the application after any of the following events occur: acknowledgments are received from all potential destinations; the message times out; or a conversation in which the message was sent terminates.

systematic collaboration

Type of cooperative work among multiple trading partners in which all participants are aware of all other participants from the beginning of the business relationships. In such an arrangement, the business relationship is ongoing and process changes occur infrequently.

System Error Handler

WebLogic Process Integrator error handler available to every workflow template definition. Unless overridden by a workflow template definition, WebLogic Process Integrator invokes the System Error Handler whenever an exception occurs. When called, the System Error Handler rolls back the specified transaction and throws an exception to the client application.

system log message

Message placed in the local log to record WebLogic Collaborate activity. An example is a system log message indicating the inability to deliver a transport message to WebLogic Collaborate because WebLogic Collaborate terminated.

system transport message

Type of XOCP transport message exchanged between trading partners that causes system activity; for example, notification of conversation termination.

tag library

Collection of custom tags available to a JSP author.

task

One of a series of discrete activities that make up a workflow. Tasks are performed automatically by the WebLogic Process Integrator server or by a workflow user. Task behavior is determined by various task properties and by the task actions that define the processing to be performed as certain task events occur.

task event

Occurrence in the life cycle of a task during which an action programmed by a workflow analyst is executed. WebLogic Collaborate supports four task events: Created, Activated, Executed, and Marked Done.

Timeout

Quality of Service (QoS) option that specifies the length of time that a sender waits for acknowledgment of a message before the message times out. After a timeout occurs, the message, acknowledgment processing, and retries are abandoned. Availability of this option depends on the business protocol being used.

token

See message token.

trading partner

Business entity that is authorized to send and receive business messages in a conversation. The configuration for a trading partner includes multiple delivery channels.

trading partner XPath filtering expression

XPath expression that reduces the set of messages that a trading partner receives by selectively passing certain messages to the targeted trading partner and blocking other messages before they are sent from WebLogic Collaborate. A trading partner XPath filtering expression is part of an XOCP filter logic plug-in, is specified in the repository by an administrator, and is associated with a particular recipient trading partner. A trading partner XPath filtering expression can examine different parts of the message-context XML document, return True or False, using different selection criteria, and thereby potentially block a message that was passed by an earlier expression.

trading partner XPath routing expression

XPath expression that specifies the list of recipients for each message sent from a trading partner. A trading partner XPath routing expression is part of an XOCP router logic plug-in, is specified in the repository by an administrator, and is defined for a particular sending trading partner. A trading partner XPath routing expression can examine different parts of the message-context XML document and select a different set of recipient trading partners. The trading partners produced by each expression can replace or add to the previously generated set of recipients.

transport

Properties for a delivery channel's transport level.

transport message

Data that is exchanged between trading partners. WebLogic Collaborate supports two types of transport messages: system transport messages and business messages.

transport service

WebLogic Collaborate component that reads incoming messages to be passed to a decoder and writes outgoing messages from an encoder for delivery to a recipient. The decoder and encoder components must use the same business protocol, such as XOCP, RosettaNet, or cXML. The transport component is based on the HTTP/HTTPS transport protocol.

transport servlet

Entry point into the WebLogic Collaborate system for HTTP/HTTPS communication between the trading partners that use XOCP, and between WebLogic Collaborate and non-XOCP trading partners. Access control at this entry point is set to allow access only by relevant WebLogic Collaborate principals. (Human users do not access this entry point.)

UDDI

See universal description, discovery, and integration (UDDI).

universal description, discovery, and integration (UDDI)

Specification for distributed Web-based information registries of Web services. The specification defines a method for publishing and researching information about Web services. UDDI is defined primarily to support Web services description language (WSDL). The main component of UDDI is the UDDI business registration, an XML file that describes a business entity and its Web services. Programs and programmers use the UDDI Business Registry to locate information about services.

value-added service

Logic that a trading partner adds to the services provided by WebLogic Collaborate. Credit checking and shipping are examples of value-added services.

W₃C

See World Wide Web Consortium (W3C).

WebLogic Collaborate

Open, standards-based software platform that enables companies to implement business-to-business collaborations on the Web. WebLogic Collaborate runs on the EJB platform WebLogic Server and is implemented entirely in Java. Central to WebLogic Collaborate is XML, which provides an open data interchange format between loosely coupled participants. WebLogic Collaborate also leverages J2EE and workflow technologies (WebLogic Process Integrator) and supports leading e-commerce business protocols, such as RosettaNet, XOCP, and cXML.

WebLogic Collaborate Messaging API

API that enables you to create Java-based XOCP messaging applications as an alternative to using workflows.

WebLogic Collaborate Administration Console

HTML interface that an administrator uses to configure and monitor WebLogic Collaborate.

WebLogic Collaborate XPath filtering expression

XPath expression that can block messages passed by previous XPath filtering expressions. A WebLogic Collaborate XPath filtering expression is part of an XOCP filter logic plug-in, is specified in the repository by an administrator, and is defined for a particular WebLogic Collaborate instance. A WebLogic Collaborate XPath filtering expression applies to all messages that the WebLogic Collaborate instance receives for all trading partners. Each expression can examine different parts of the message-context XML document and return True or False, using different selection criteria. The WebLogic Collaborate XPath filtering expressions are the final set of XPath expressions that evaluate messages before those messages are finally received by trading partners.

WebLogic Collaborate XPath routing expression

XPath expression that specifies all messages that can be sent from the WebLogic Collaborate instance. A WebLogic Collaborate XPath routing expression is part of an XOCP router logic plug-in, is specified in the repository by an administrator, and is defined for a particular WebLogic Collaborate instance. A WebLogic Collaborate XPath routing expression is evaluated after the intended recipient XPath routing expressions and trading partner XPath routing expressions are evaluated, and thus can modify or override the list of trading partners selected by those expressions.

WebLogic Process Integrator

Automation tool that enables you to define and monitor workflows.

WebLogic Process Integrator plug-in

WebLogic Collaborate component that extends WebLogic Process Integrator for use with WebLogic Collaborate.

WebLogic Process Integrator Studio

WebLogic Process Integrator client application that is used to define and monitor workflows.

WebLogic Server Administration Console

HTML interface that an administrator uses to configure and monitor WebLogic Server.

Web service

Business functionality made available by one company, usually through an Internet connection, for use by another company or software program.

Web services description language (WSDL)

Specification for an XML-based grammar that defines and describes a Web service. A WSDL is necessary if two different online systems need to communicate without human intervention.

WLC

Name of the root element in the repository.

workflow

Business process, such as order processing, that is automated in whole or in part. When a workflow is executed, information is passed to a particular participant at a particular time, according to a set of intelligent business rules that enable computers to perform most of the work, leaving humans to deal only with exceptions.

workflow expression

Definition of a calculation or an evaluation that WebLogic Process Integrator performs at run time. The syntax of workflow expressions is comparable to that of SQL.

workflow node

Component of a WebLogic Process Integrator workflow, consisting of starts, tasks, events, joins, decisions, and dones.

workflow template

Folder or container in the WebLogic Process Integrator Studio. A workflow template represents a workflow and has a meaningful name, such as Order Processing or Billing. The workflow template combines various workflow template definitions (versions) of its implementation. A workflow template controls which organizations can use the contained workflow template definitions.

workflow template definition

Definition or version of a workflow, distinguished by the dates on which it becomes effective and expires. At run time, WebLogic Process Integrator starts an instance (or session) of a workflow template definition, selecting the most effective (or current and active) definition.

World Wide Web Consortium (W3C)

International organization that establishes standards for client and server protocols in order to facilitate Internet-based communications and commerce.

WSDL

See Web services description language (WSDL).

X.509

Widely used specification for digital certificates.

XML

See extensible markup language (XML).

XML schema

Language for specifying the structure of XML documents; replacement for the XML DTD.

XML service

One of several Apache XML services provided for WebLogic Collaborate. These services include the Apache XML Parser, DOM implementation, and the XSLT style sheet processor.

XML vocabulary

Set of XML tags that define the elements that may be included in a DTD. An XML vocabulary can be developed for a particular industry or business function.

XOCP

See extensible open collaboration protocol (XOCP).

XOCP filter

A logic plug-in chain that consists of the following logic plug-ins in this order:

- (1) the XOCP filter logic plug-in which is provided by WebLogic Collaborate; and
- (2) optional customer-supplied logic plug-ins.

XOCP filter logic plug-in

A logic plug-in that determines which XOCP business messages a trading partner will receive. The XOCP filter logic plug-in is one of the logic plug-ins in the XOCP filter. The XOCP filter logic plug-in uses the following sequence of XPath expressions: first, trading partner XPath filtering expressions, and then, WebLogic Collaborate XPath filtering expressions.

XOCP router

A logic plug-in chain that consists of the following logic plug-ins in this order:

- (1) XOCP router logic plug-in, which is provided by WebLogic Collaborate;
- (2) optional customer-supplied logic plug-ins; and
- (3) XOCP router enqueue logic plug-in.

XOCP router enqueue logic plug-in

A logic plug-in that queues an XOCP message for potential delivery to each recipient.

XOCP router logic plug-in

A logic plug-in that determines the recipients for an XOCP business message. The XOCP router logic plug-in is one of the logic plug-ins in the XOCP router. The XOCP router logic plug-in uses the following sequence of XPath expressions: intended recipient XPath routing expressions, trading partner XPath routing expressions, and WebLogic Collaborate XPath routing expressions.

XPath

XML path language. XPath models a message-context XML document as a tree of nodes and then addresses the nodes of the XML document. The XPath language includes a stand-alone subset that can be used to test whether a node matches a

pattern. In WebLogic Collaborate, routers and filters use this feature to identify trading partner elements of WebLogic Collaborate configuration information. XPath routing expressions specify business criteria for message distribution. XPath filtering expressions return a true or false result and act as gatekeepers, filtering out unwanted messages sent to a receiving trading partner. XPath expressions are associated exclusively with messages that use the default XOCP protocol. See also intended recipient XPath routing expression, WebLogic Collaborate XPath filtering expression, WebLogic Collaborate XPath routing expression, trading partner XPath filtering expression, and trading partner XPath routing expression.

XPath filtering expression

See XPath.

XPath routing expression

See XPath.

XSL

See extensible style sheet language (XSL).

XSL style sheet language transformations (XSLT)

W3C specification that explains how to transform XML documents from one document definition format to another.

XSLT

See XSL style sheet language transformations (XSLT).