## SeeBeyond ICAN Suite

## CIDX ETD Library User's Guide

Release 5.0.5 for Schema Run-time Environment (SRE)

SEEBEYロND。

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## Chapter 1

## Introduction

This chapter introduces you to the CIDX ETD Library User's Guide.

### 1.1 Overview

An Event Type Definition (ETD) library contains sets of pre-built structures for CIDX (Chemical Industry Data eXchange) industry-standard formats. e*Gate ETD files are message format definitions in two formats:

- Monk
- Java

The CIDX ETD Library is a feature of the $\mathrm{e}^{*}$ Gate Integrator system, and contains message definitions for CIDX ChemXML version 2.0.1 messages. This document gives a brief overview of CIDX and the CIDX message structures provided with e*Gate, and provides information on installing and using the CIDX ETD Library.

### 1.2 Intended Reader

The reader of this guide is presumed to be a developer or system administrator with responsibility for maintaining the $\mathrm{e}^{*}$ Gate system, to have familiarity with Windows and/or UNIX operations and administration, and to be thoroughly familiar with Windows-style GUI operations.

### 1.3 Supported Operating Systems

The $\mathrm{e}^{*}$ Gate CIDX ETD Library is available on the following platforms:

- Windows 2000, Windows XP, and Windows Server 2003
- HP-UX 11.0 and 11i (PA-RISC)
- IBM AIX 5.1L and 5.2
- Sun Solaris 8 and 9

Note: UNIX Systems—This guide uses the backslash ("\") as the separator within path names. If you are working on a UNIX system, make the appropriate substitutions.

## Chapter 2

## CIDX Overview

This chapter presents an overview of CIDX, including the structure of a CIDX envelope and its data elements.

### 2.1 Introduction to CIDX

### 2.1.1. What Is CIDX?

CIDX (the Chemical Industry Data eXchange Association) is an organization whose members have worked together to develop commercial solutions for the chemical industry. CIDX members have developed various standards, conventions, and processes. One of these is a set of electronic transactions specifically designed for the buying, selling, and delivery of chemicals, called Chem eStandards, which facilitates the use of automated data exchange between chemical companies. CIDX will continue to support and maintain Chem eStandards.

### 2.1.2. What Is Chem eStandards?

Developed in the second half of the year 2000, the CIDX Chem eStandards guidelines (also known as ChemXML) map out the ways in which chemical companies trade electronically, with each other and with suppliers. The standards are intended for the use of chemical manufacturers, distributors, chemical industry marketplaces, and software solution providers.
Chem eStandards guidelines cover the following:

- Enveloping and security-the requirements for communication, message enveloping, and security for all Chem eStandards transactions.
- Customer information-specifies standards for the interchange of customer information between buyers, sellers, and marketplaces.
- Catalog-specifies standards for the promoting, selling, selecting, and buying of products and services relating to the chemical industry.
- Purchase order—specifies standards for the transmission of purchase order information for products and services relating to the chemical industry.
- Logistics-specifies standards for the scheduling and transportation of chemicals and other products relating to the chemical industry, and also for associated services.
- Financial information-specifies standards for the exchanging of financial information, including invoicing and payment processes between marketplaces, participating companies, and their financial institutions.
- Forecasting-specifies standards for forecasting, planning, and inventory management.
- Exchange interactions-specifies standards for key interactions between buyers, sellers, and marketplaces.

CIDX version 2.0.1 includes specific guidelines for 47 unique transactions. The CIDX ETD Library supports all these transactions, together with several Acknowledgment and Exception messages.

In the future, the Chem eStandards eBusiness protocol will continue to be managed and maintained by CIDX.
The Chem eStandards protocol is freely available for general use.

### 2.1.3. Relationship Between Chem eStandards and RosettaNet

Chem eStandards used the RosettaNet data specification and code tables as a starting point. Chem eStandards is closely based on RosettaNet 1.1, which itself uses XML (eXtensible Markup Language). However, there are some key differences.
Similarities to RosettaNet 1.1

- XML-based, and uses the RosettaNet DTDs.
- Uses the transport, envelope, and security features of RNIF 1.1, including use of digital signatures with HTTPS. This allows secure exchange of credit card and other personal information over the Internet.
Differences between CIDX 2.0.1 and RosettaNet 1.1
- There is one message for each business function, rather than using the same message for multiple purposes. This reduces the number of variable or optional fields within each transaction. It also makes it easier to implement changes to transaction structures.
- Some transactions only require a single message to be complete; for example, Product Catalog Update. A RosettaNet PIP always includes more than one message required to complete the PIP.
- CIDX includes only two types of message responses. For more information on response transactions, refer to "Types of Response Transactions" on page 14.
- Global Administering Authority Code (a value from the Preamble): ChemXML value is CIDX.
- MIME type: RNIF 1.1 MIME type is "Application/x-RosettaNet." CIDX MIME type is "Application/x-ChemXML."


### 2.2 Supported Versions

The CIDX ETD Library supports version 2.0.1 of the CIDX standard.

### 2.3 What Is a Message Structure?

The term message structure refers to the way in which data elements are organized and related to each other for a particular eBusiness message. Each message structure consists of the following:

- Physical hierarchy

The predefined way in which envelopes, segments, and data elements are organized to describe a particular CIDX eBusiness message.

- Delimiters

The specific predefined characters that are used to mark the beginning and end of envelopes, segments, and data elements. In CIDX, the XML begin and end tags are the delimiters.

- Properties

Characteristics of a data element, such as the length of each element, default values, and indicators that specify attributes of a data element-for example, whether it is required, optional, or repeating.
The properties of a CIDX XML tag are defined by the DTD (Document Type Definition).
$e^{*}$ Xchange Partner Manager uses e*Gate Event Type Definitions, which are based on the CIDX message structures, to interpret the inbound or outbound messages. e ${ }^{*}$ Gate installation includes message structures for a number of CIDX eBusiness messages. The ETDs in the library are based on the CIDX DTDs.

### 2.4 Structure of a CIDX Message

The CIDX Service protocol message is the business message that is exchanged between two CIDX entities (Services and/or Agents). Each message is an XML document that corresponds to the Document Type Definition (DTD) for the specific transaction.
This message is made up of the following parts:

- Preamble
- Service Header
- Service Content

There are also certain additional components.

All parts of the message are in XML format, packaged into a MIME multipart/related content-type message.
The structure of a CIDX message envelope is shown in Figure 1.
Figure 1 Structure of a CIDX Business Message

| eStandards Version (4 Bytes) |
| :--- |
| Content Length (4 Bytes) |
|  |
| Preamble |
| Service Header |
| Process Identity |
| Service Route |
| $\quad$ Transaction Control |
| Service Content (unique for each transaction) |
|  |
| Signature Length (4 Bytes) |
| Digital Signature (Variable Length) |

### 2.4.1. Preamble

All CIDX messages must have a Preamble. It is specified with a DTD that is common across all messages. The Preamble includes information that is global to the transaction, such as CIDX version and datestamp.
The CIDX Preamble uses the DTD for RosettaNet 1.1. However, the Global Administering Authority Code is CIDX to distinguish CIDX transactions from RosettaNet transactions. This is the only difference in the Preamble between standard RNIF 1.1 and CIDX.

An example of an actual CIDX Preamble is shown in Figure 2.
Figure 2 Example of a CIDX Preamble

```
<!DOCTYPE Preamble SYSTEM
"PreamblePartMessageGuideline.dtd" >
<Preamble>
<VersionIdentifier>2.0.1</VersionIdentifier>
<DateTimeStamp>20010118T132000.0500Z</
DateTimeStamp>
<GlobalAdministeringAuthorityCode CIDX
</GlobalAdministeringAuthorityCode>
<GlobalUsageCode>Test</GlobalUsageCode>
</Preamble>
```


### 2.4.2. Service Header

The Service Header is specified with a DTD that is common across all messages. A separate DTD for each message validates the body of the message.

The Service Header contains the routing and processing information for the transaction, including the following three components:

- Process Identity-This describes the process to be carried out by the transaction in the Service Content; for example, the transaction description and Global Process Code.
- Service Route-"from" and "to" routing information.
- Transaction Control-Information about the transaction and its routing, such as the number of times the transaction has been attempted and the time allowed for acknowledgment.
An example of a CIDX Service Header is shown in Figure 3. The differences between the CIDX Service Header and the standard RNIF 1.1 Service Header are indicated.

Figure 3 Example of a CIDX Service Header (shown in two columns)

| Content-Description: Service Header <br> <?xml version="1.0" encoding="UTF-8"?> <br> <!DOCTYPE ServiceHeader SYSTEM <br> "ServiceHeaderPartMessageGuideline.dtd"> <br> <ServiceHeader> <br> <ProcessControl> <br> <ProcessIdentity> <br> <description> <br> <FreeFormText>Create purchase order <br> transaction.</FreeFormText> <br> </description> <br> <GlobalProcessCode Order Create\&/ CIDX- <br> GlobalProcessCode> specific <br> <GlobalProcessIndicatorCode E E41>/ <br> GlobalProcessIndicatorCode> <br> <initiatingPartner> <br> <GlobalBusinessIdentifier>001307032</ <br> GlobalBusinessIdentifier> <br> </initiatingPartner> <br> <Instanceldentifier>c.iabcde7j.x8m4.000000e3836b0 <br> 4912.ikikv5t1.x8m4..basf_dev. <br> 1307032.E41-1_0-Buyer-Create Order Dow2.1.0.1</ <br> InstanceIdentifier> <br> <VersionIdentifier 2.0 </VersionIdentifier> <br> </ProcessIdentity> <br> <ServiceRoute> <br> <fromService> <br> <BusinessServiceDescription> <br> <GlobalBusinessServiceCode>Buyer Service</ <br> GlobalBusinessServiceCode> <br> </BusinessServiceDescription> <br> </fromService> <br> <toService> <br> <BusinessServiceDescription> <br> <GlobalBusinessServiceCode>Seller Service</ <br> GlobalBusinessServiceCode> <br> </BusinessServiceDescription> <br> </toService> <br> </ServiceRoute> <br> <TransactionControl> <br> <AttemptCount>1</AttemptCount> <br> <PartnerRoleRoute> <br> <fromRole> <br> <PartnerRoleDescription> <br> <GlobalPartnerRoleClassificationCode>Buyer</ <br> GlobalPartnerRoleClassificationCode> <br> </PartnerRoleDescription> <br> </fromRole> |
| :---: |


| <toRole> |
| :--- |
| <PartnerRoleDescription> |
| <GlobalPartnerRoleClassificationCode>Seller</ |
| GlobalPartnerRoleClassificationCode> |
| </PartnerRoleDescription> |
| </toRole> |
| </PartnerRoleRoute> |
| <TransactionIdentity> |
| <description> |
| <FreeFormText>Create purchase order |
| transaction.</FreeFormText> |
| </description> |
| <GlobalTransactionCode>Order Create</ |
| GlobalTransactionCode> |
| <Instanceldentifier>c.iabcde7j.x8m4..101.200138158 |
| 1.0</InstanceIdentifier> |
| </TransactionIdentity> |
| <ActionControl> |
| <ActionIdentity> |
| <GlobalBusinessActionCode>Order Create</ |
| GlobalBusinessActionCode> |
| <Instanceldentifier>d.iabcde7j.x8m4.</ |
| Instanceldentifier> |
| <VersionIdentifier>2.0</VersionIdentifier> |
| </ActionIdentity> |
| <GlobalDocumentFunctionCode>Request</ |
| GlobalDocumentFunctionCode> |
| <PartnerRoute> |
| <fromPartner> |
| <PartnerDescription> |
| <BusinessDescription> |
| <GlobalBusinessIdentifier>001307032</ |
| GlobalBusinessIdentifier> |
| </BusinessDescription> |
| <GlobalPartnerClassificationCode>End User</ |
| GlobalPartnerClassificationCode> |
| </PartnerDescription> |
| </fromPartner> |
| <toPartner> |
| <PartnerDescription> |
| <BusinessDescription> |
| <GlobalBusinessIdentifier>001381581</ |
| GlobalBusinessIdentifier> |
| </BusinessDescription> |
| <GlobalPartnerClassificationCode>End User</ |
| GlobalPartnerClassificationCode> |
| </PartnerDescription> |
| </toPartner> |
| </PartnerRoute> |
| </ActionControl> |
| </TransactionControl> |
| </ProcessControl> |
| </ServiceHeader> |

<toRole>
<GlobalPartnerRoleClassificationCode>Seller</
GlobalPartnerRoleClassificationCode>
</PartnerRoleDescription>
</PartnerRoleRoute>
<TransactionIdentity>
<description>
transaction.</FreeFormText>
</description>
<GlobalTransactionCode>Order Create</
GlobalTransactionCode>
<InstanceIdentifier>c.iabcde7j.x8m4..101.200138158
1.0</InstanceIdentifier>
</TransactionIdentity>
<ActionControl>
<ActionIdentity>
<GlobalBusinessActionCode>Order Create</
GlobalBusinessActionCode>
<Instanceldentifier>d.iabcde7j.x8m4.<l
位ier>
</ActionIdentity>
<GlobalDocumentFunctionCode>Request</
GlobalDocumentFunctionCode>
<PartnerRoute>
<fromPartner>
<PartnerDescription>
BusinessDescription>

GlobalBusinessIdentifier>
</BusinessDescription>
<GlobalPartnerClassificationCode>End User</
</PartnerDescription>
</fromPartner>
<toPartner>
<PartnerDescription>
<BusinessDescription>
<GlobalBusinessIdentifier>001381581</
GlobalBusinessIdentifier>
</BusinessDescription>
<GlobalPartnerClassificationCode>End User</
GlobalPartnerClassificationCode>
</PartnerDescription>
</toPartner>
</PartnerRoute>
</ActionControl>
</TransactionControl>
</ServiceHeader>

### 2.4.3. Service Content

The Service Content is the actual message content; for example, the purchase order information.
The structure of the Service Content is unique for each transaction. There is a separate Service Content DTD for each transaction in the CIDX ETD Library.

### 2.5 About XML

RosettaNet—and therefore CIDX—uses XML (eXtensible Markup Language), which has the following features:

- Begin/end tag delimited syntax
- Tags are usually nested into related fields or data objects
- Metadata allows bilateral change between trading partners
- Web browsers now parse XML documents
- Tags are user-defined or industry-defined
- DTDs usually accompany XML documents, to specify what tags to expect


### 2.6 Security

CIDX 2.0.1 follows the security standards specified by RosettaNet. It supports the following:

- Transport via HTTP with SSL (HTTPS)
- Optional digital signatures
- Digital certificates-both ends authenticated:
- SSL requires the server to have a certificate
- RosettaNet additionally requires the client to have a certificate
- Optional non-repudiation, including an audit trail of the message and signature


### 2.7 Types of CIDX Messages

Exchanges of CIDX messages fall into three main categories:

- Single-message transactions

Some transactions require only a single message; for example, Product Catalog Update (requires no response).

- Message/response

Some messages require a response. This type of response is called a Transaction Response. The word "Response" appears in the name of the response transaction. The message and the response are both unique CIDX transactions; for example, Payment and Payment Response.

- Request/response

Some messages are considered requests. For these messages, the word "Request" appears in the transaction name; for example, Order Status Request and Order Status. The request and the response are both unique CIDX transactions.

### 2.8 Types of Response Transactions

The Chem eStandards eBusiness protocol allows for two types of response messages:

- Technical responses (generic receipt acknowledgments)

A technical response is returned as soon as the message is received. A technical response should be returned for each message received. Receipt Acknowledgment and Receipt Acknowledgment Exception are examples of technical responses.

- Transaction responses (transaction-specific acknowledgments)

A transaction response is a specific transaction that is designated as the correct response message for a specific message. For example, Order Response is the correct transaction response for an Order Create message. Only a few types of message are designated as response messages. The word Response always appears in the message title.

### 2.9 Acknowledgment Types

The CIDX ETD Library, like RosettaNet 1.1, provides several acknowledgment transactions. The transaction names, and the file names in the ETD Library, are shown in Table 1.

If you are using e ${ }^{*}$ Xchange Partner Manager, CIDX Business Signal Receipt Acknowledgments and Receipt Acknowledgment Exceptions are automatically handled by e*Xchange.

A Receipt Acknowledgment is required for every transaction.

Table 1 Acknowledgment Transactions

| Transaction Name | File Name: Java (extension .xsc and .jar) | File Name: Monk <br> (extension .ssc) |
| :--- | :--- | :--- |
| Failure Notification | FailureNotification | CIDX_0A1Notification_201 |
| Acceptance <br> Acknowledgement | AcceptanceAcknowledgement | CIDX_AcceptAck_201 |
| Acceptance <br> Acknowledgement <br> Exception | AcceptanceAcknowledgementException | CIDX_AcceptAckExcept_201 |
| Exception | Exception | ReceiptAcknowledgement |
| Receipt <br> Acknowledgment | ReceiptAcknowledgementException | CIDX_Exception_201 |
| Receipt <br> Acknowledgment <br> Exception | CIDExcept_201 |  |

### 2.10 Implementation

### 2.10.1.e*Gate Support of CIDX

In the CIDX ETD Library, $\mathrm{e}^{*}$ Gate offers CIDX Event Type Definitions (ETDs) pre-built in two versions: Java and Monk.

## Structures

To create a new e ${ }^{*}$ Gate ETD from a CIDX DTD, the XML Toolkit must be installed. The $\mathrm{e}^{*}$ Gate ETD Editor invokes the XML Toolkit during conversion.
If you are creating a Monk ETD, choose the XML Converter within the build option for the Monk ETD Editor.
If you are creating a Java ETD, use the DTD Wizard within the Java ETD Editor (from the File menu, choose New).

## Validation

CIDX, based on the RosettaNet standard, supports a logical segmentation of validation steps. $e^{*}$ Gate performs the validation on each part of the CIDX message.
In CIDX, incoming messages go through the following validation steps:

- Grammar Validation
- Sequence Validation
- Schema Validation
- Content Validation

Grammar and sequence validations are performed against the Service Header DTD. Service Content validation is not done until after schema validation. If you are using the $\mathrm{e}^{*}$ Xchange Partner Manager, note that $\mathrm{e}^{*}$ Xchange does not validate service content.

Note: The Service Header might be valid according to the DTD even if the actual Service Content contains errors.

## Translations

$e^{*}$ Gate does not contain any pre-built translations for CIDX. You can build these scripts in the e*Gate Collaboration Rules Editor GUI, which provides user-friendly drag-anddrop front ends for creating both Java and Monk scripts.

### 2.11 Additional Information

For more information on CIDX, visit www.cidx.org.
For more information on Chem eStandards version 2.0x, visit: www.cidx.org/ commerce/pdfs/Chem \% 20eStandards\%20v2.0.pdf.
This information is correct at the time of going to press; however, SeeBeyond has no control over this site. If you find the link is no longer correct, use a search engine to search for CIDX.

## Chapter 3

## CIDX Template Installation

This chapter provides information on installation of the CIDX templates, and the files and folders created as a result of installation.

### 3.1 Installation Procedure

This section explains how to install the CIDX template files.
Note: This procedure only covers the specific portions of installation that relate to template installation. For complete installation instructions, refer to the SeeBeyond ICAN Suite Installation Guide.

Before you begin:

- You must have Administrator privileges to install back-end components such as the CIDX templates.
- Exit all Windows programs, including any anti-virus applications, before running the setup program.
- Verify your e*Gate registry host name, schema name, control broker logical name, and the administrator user name and password.


## To install the CIDX templates on Windows

1 Log in on the workstation on which you want to install the templates.
2 Insert the installation CD into the CD-ROM drive.
If Autorun is enabled, the setup program automatically starts. Otherwise:

- On the task bar, click the Start button, and then click Run.
- In the Open field, type $\mathbf{D}: \backslash$ setup $\backslash$ setup.exe where $\mathbf{D}$ : is your CD-ROM drive.

3 Follow the installation instructions until you come to the Please choose the product to install dialog box.

4 Select e*Gate Integrator, and then click Next.
5 Follow the on-screen instructions until you come to the second Please choose the product to install dialog box.
6 Select Add-ons, and then click Next.

7 Follow the on-screen instructions until you come to the Select Components dialog box.

8 Highlight (but do not check) ETD Libraries, and then click the Change button.
The Select Sub-components dialog box appears.
9 Select CIDX ETD Library 4.5.2.
10 Click Continue to return to the Select Components dialog box, and then click Next.
11 Follow the rest of the on-screen instructions to install the CIDX templates.
Note: Do not change the default directory location for the CIDX template files.

## To install the CIDX templates on UNIX

1 Follow the steps for the standard e*Gate installation. For more information, refer to the SeeBeyond ICAN Suite Installation Guide.

2 At the prompt Choose e*Gate Add-on Application, enter the number assigned for the CIDX ETD Library 4.5.2 (scroll down the list to check).

3 Enter the installation path, or press Enter to accept the default path (recommended).
4 Enter the hostname of the registry server (UNIX host).
The library is installed.
5 Conditional: if you need to install more than one ETD library, repeat steps 2 through 4 as needed.

## Chapter 4

## The CIDX ETD Library

The CIDX ETD Library supports all 47 unique transactions that comprise the CIDX version 2.0.1 standard.

In addition, it supports the following transactions:

- Failure Notification
- Exception
- Acceptance Acknowledgment
- Acceptance Acknowledgment Exception
- Receipt Acknowledgment
- Receipt Acknowledgment Exception

This chapter lists file and directory names in the CIDX ETD Library.

### 4.1 Folder Structure Created by Installation

By default, installation places the CIDX templates in the locations shown in Table 2.
Table 2 CIDX Template Locations

| These files... | Are installed in this location... |
| :--- | :--- |
| Java | K<eGate $>\backslash$ Server\registry\repository\default\ETD\templates\CIDX |
| Monk | K<eGate>\Server\registry\repository\default\monk_scripts\templates\CIDX |

Installation commits the templates to the default schema on the Registry Host that you specified during the installation process.
There is an .ssc file for each Monk CIDX message structure, and an .xsc and a .jar file for each Java CIDX message structure.

UNIX installation places the files in the same path locations and directories as shown above.

### 4.2 CIDX ETD Files

Installation of CIDX includes a number of files needed by e*Gate for processing the various supported transactions.

### 4.2.1. Monk Files

The files for the Monk ETDs are listed in Table 3. Monk ETDs have the extension .ssc; Java ETDs have the extension .xsc.

Table 3 CIDX Monk Files

| Transaction Name | File Name |
| :---: | :---: |
| Signals (in <eGate>\Server\registry\repository\default\monk_scripts\templates\CIDX\CIDX2.0.1) |  |
| Exception | CIDX_Exception_201 |
| Receipt Acknowledgement | CIDX_RecAck_201 |
| Acceptance Acknowledgement | CIDX_AcceptAck_201 |
| Receipt Acknowledgement Exception | CIDX_RecAckExcept_201 |
| Acceptance Acknowledgement Exception | CIDX_AcceptAckExcept_201 |
| Version 2.0.1 messages (in <eGate>\Server\registry\repository\default\monk_scripts\templates\CIDX\CIDX2.0.1) |  |
| Failure Notification | CIDX_0A1Notification_201 |
| Qualification Request | CIDX_E11_201 |
| Qualification Response | CIDX_E12_201 |
| Request for Quote | CIDX_E21_201 |
| Product Catalog Update | CIDX_E22_201 |
| Customer Specific Catalog Update | CIDX_E23_201 |
| Order Create | CIDX_E41_201 |
| Order Response | CIDX_E42_201 |
| Order Status Response | CIDX_E43_201 |
| Order Status Request | CIDX_E44_201 |
| Order Change | CIDX_E45_201 |
| Order Cancel | CIDX_E46_201 |
| Order Cancel Response | CIDX_E47_201 |
| Carrier Weights | CIDX_E61_201 |
| Freight Bill | CIDX_E62_201 |
| Load Tender Motor | CIDX_E63_201 |
| Load Tender Ocean | CIDX_E64_201 |
| Load Tender Rail | CIDX_E65_201 |

Table 3 CIDX Monk Files

| Transaction Name | File Name |
| :---: | :---: |
| Load Tender Response | CIDX_E66_201 |
| Shipment Status | CIDX_E71_201 |
| Ship Notice | CIDX_E72_201 |
| Invoice | CIDX_E81_201 |
| Payment | CIDX_E82_201 |
| Payment Detail | CIDX_E83_201 |
| Payment Response | CIDX_E84_201 |
| Delivery Receipt | CIDX_F11_201 |
| Delivery Receipt Response | CIDX_F12_201 |
| Demand Forecast | CIDX_F13_201 |
| Demand Forecast Response | CIDX_F14_201 |
| Demand Plan | CIDX_F15_201 |
| Demand Plan Response | CIDX_F16_201 |
| Inventory Actual Usage | CIDX_F17_201 |
| Inventory Actual Usage Response | CIDX_F18_201 |
| Replenishment Proposal Cancel | CIDX_F19_201 |
| Replenishment Proposal Change | CIDX_F20_201 |
| Replenishment Proposal Request | CIDX_F21_201 |
| Replenishment Proposal Response | CIDX_F22_201 |
| Supply Plan | CIDX_F23_201 |
| Supply Plan Response | CIDX_F24_201 |
| Posting Accept | CIDX_F41_201 |
| Posting Accept Response | CIDX_F42_201 |
| Posting Cancel | CIDX_F43_201 |
| Posting Cancel Response | CIDX_F44_201 |
| Posting Change | CIDX_F45_201 |
| Posting Create | CIDX_F46_201 |
| Posting Response | CIDX_F47_201 |
| Posting Status Request | CIDX_F48_201 |
| Posting Status Response | CIDX_F49_201 |

### 4.2.2. Java Files

The files for the Java ETDs are listed in Table 4. Java ETDs have the extension .xsc and an associated .jar file.

Table 4 CIDX Java Files

| $\quad$ Transaction Name/File Name |
| :--- |
| Signals (in <eGate>\Server\registry\repositoryldefaultletd\templates\CIDX\signal) |
| AcceptanceAcknowledgement |
| AcceptanceAcknowledgementException |
| Exception |
| FailureNotification |
| ReceiptAcknowledgement |
| ReceiptAcknowledgementException |
| Version 2.0.1 messages (in <eGate>\Serverlregistry\repositoryldefaultletdltemplates\CIDX\v201) |
| CarrierWeights |
| CustomerSpecificCatalogUpdate |
| DeliveryReceipt |
| DeliveryReceiptResponse |
| DemandForecast |
| DemandForecastResponse |
| DemandPlan |
| DemandPlanResponse |
| FreightBill |
| InventoryActualUsage |
| InventoryActualUsageResponse |
| Invoice |
| LoadTenderMotor |
| LoadTenderOcean |
| LoadTenderRail |
| LoadTenderResponse |
| OrderCancel |
| OrderCancelResponse |
| OrderChange |
| OrderCreate |
| OrderResponse |
| OrderStatusRequest |
| OrderStatusResponse |
| Payment |
| PaymentDetail |
| PaymentResponse |
| PostingAccept |

Table 4 CIDX Java Files

| $\quad$ Transaction Name/File Name |
| :--- |
| PostingAcceptResponse |
| PostingCancel |
| PostingCancelResponse |
| PostingChange |
| PostingCreate |
| PostingResponse |
| PostingStatusRequest |
| PostingStatusResponse |
| ProductCatalogUpdate |
| QualificationRequest |
| QualificationResponse |
| ReplenishmentProposalCancel |
| ReplenishmentProposalChange |
| ReplenishmentProposalRequest |
| ReplenishmentProposalResponse |
| RequestForQuote |
| ShipmentStatus |
| ShipNotice |
| SupplyPlan |
| SupplyPlanResponse |

### 4.3 CIDX Template Files

The file name for each template is comprised of the same set of elements in the same sequence. The file name for a business signal has a different structure than that of a business message.
Breakdown and examples are given below.

### 4.3.1. Business Messages - Monk

The file names for Monk CIDX 2.0.1 messages are constructed as follows:

- CIDX_ to indicate that they are CIDX ETDs
- Name of message (for example, E64 or F41)
- 201 to indicate that they are CIDX version 2.0.1
- .ssc (file extension)

For example: CIDX_F12_201.ssc
The example above (CIDX_F12_201.ssc) contains Preamble_201.ssc,
ServiceHeader_201.ssc, and CIDX_F12_201_SC.scc.

### 4.3.2. Business Messages-Java

The file names for Java CIDX 2.0.1 messages are constructed as follows:

- Transaction name
- .xsc (file extension)

For example: DeliveryReceiptResponse.xsc

### 4.4 Customizing a Java ETD

Currently SeeBeyond does not support the editing of pre-built Java ETDs. However, ${ }^{*}$ Gate offers a feature that allows you to convert existing Monk ETDs (.ssc files) to Java-enabled ETDs (.xsc files). This feature is the SSC Wizard.
To create a customized Java ETD
1 Create a corresponding Monk ETD, or use the Monk version of the Java ETD if available.
2 Customize the Monk ETD (.ssc file) using the $\mathrm{e}^{*}$ Gate ETD Editor.
3 Convert the Monk ETD to a Java ETD using the e*Gate SSC Wizard.
When the conversion is done, you have three files:

- The original Monk ETD (.ssc file) Keep this file in case further customization is needed.
- The Java version of the ETD (.xsc file)
- The corresponding .jar file

If you need to make further changes to the ETD, make the changes in the .ssc file and run the conversion again.
For specific instructions on using the e*Gate ETD Editor or the SSC Wizard, refer to the $e^{*}$ Gate Integrator User's Guide.

# Glossary of RosettaNet/CIDX Terms 

## business message

In RosettaNet, the individual business documents involved in a PIP (action and signal messages) are exchanged in a container that packs together other related entities such as headers and digital signatures. This container with its constituent parts is the basic unit of exchange between two RosettaNet end-points, and is known as a "RosettaNet Business Message."

A RosettaNet Business Message always contains a Preamble header, a Service Header, and a Service Content.

## business object

A "business object" is a message plus a digital signature, version number, and length.

## CA

An acronymn for Certification Authority. A Certification Authority is an application that puts a public key into a certificate and digitally signs it to guarantee that the public key belongs to the stated owner.

## CRL

An acronymn for Certificate Revocation List. A CRL is a binary file that allows clients and servers to check whether the entity to be verified has a current, valid digital certificate. Normally, the Certification Authority (CA) is responsible for the nonrepudiation of transactions, for maintaining an audit log, and for caching CRLs.

## Document Type Definition (DTD)

DTDs usually accompany XML documents, to specify what tags to expect.
All DTDs for RosettaNet messages are issued as both Message Guidelines (HTML document) and DTDs. These are part of the RosettaNet Implementation Framework, although documented separately.

## DTD

See Document Type Definition.

## DUNS number

A DUNS number is a unique, 9-digit global company or business identifier that is assigned to the company by Dun \& Bradstreet.

## guideline

A set or collection of specifications, sometimes including specific implementation advice.

## header

Control information prepended to the content.

## marketplace

A Marketplace is an online facility for trading chemical products. The Marketplace collects and maintains a record of Buyers and Sellers, their relationships, and their transactions in the Marketplace, in accordance with the contractual agreement between the concerned parties.

The Marketplace provides a registration process that all buyers and sellers must follow, and also provides a catalog of products and services.

## payload container

The Service Header and Service Content.

## Preamble

The Preamble section of a CIDX message contains elements that are global to the RosettaNet service and those that are common to the Service Header and Service Content. It is specified with a DTD that is common across all messages (preamble.dtd).

## Service Content

The "Service Content" of a RosettaNet message is the business message.

## Service Header

The Service Header is specified with a DTD that is common across all messages. A separate DTD and/or XML schema for each message validates the body of the messages.

The Service Header format is fixed and independent of the specifics of the message contained in the payload. However, the Service Content might change based on variance in the business content.

## standard

A set of clearly defined and agreed-upon conventions for specific programming interfaces that has been approved by a formally constituted standards-setting body. CIDX uses an implementation of RosettaNet, which has created a standard for eBusiness messages.

## validation

The verifying of all or part of a message against the requirements of the specification. Validation of a CIDX message compares the message against the content and sequence requirements for the CIDX message standard. A data element, action, transaction, or process is valid only if it meets all requirements of the CIDX specification.

## VMI

An acronym for Vendor-Managed Inventory; a system of electronic inventory management that uses EDI to help ensure inventory is maintained at the optimum levels.

## XML document

A data object written in XML (eXtensible Markup Language). An XML document is made up of virtual storage units called entities, containing either parsed or unparsed data. Parsed data is made up of characters, some of which form the character data in the document and some of which form markup. Markup encodes a description of the document's storage layout and logical structure.

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