

Informatica® Cloud B2B Gateway
Winter 2019 March.- -

Cloud B2B Gateway

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Winter 2019 March.- -
March 2019

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Preface

The *Cloud B2B Gateway User Guide* explains how business users can use Cloud B2B Gateway for end-to-end handling and exchange of Electronic Data Interchange (EDI) messages and custom files with partners. It assumes that you have a working knowledge of Informatica Intelligent Cloud Services. It also assumes that you are familiar with the EDI document standards, the format and requirements of exchanging EDI messages with partners, and the integration of data to the organization's backend systems.

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CHAPTER 1

Introduction to Cloud B2B Gateway

This chapter includes the following topics:

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Cloud B2B Gateway overview

Use Cloud B2B Gateway to streamline and automate order-to-cash and procure-to-pay processes with your trading partners.

Cloud B2B Gateway simplifies the order-to-cash and procure-to-pay cycles and reduces the cycle time with end-to-end processing and handling of the exchange of Electronic Data Interchange (EDI) messages with your partners, including the X12 and EDIFACT EDI standards. If any of your partners do not use EDI, you can use Cloud B2B Gateway to exchange any other type of file, for example, CSV, XML, or Excel files.

Cloud B2B Gateway uses Data Integration mappings and tasks to process and exchange messages and files between the organization and its partners. To simplify EDI message handling, Cloud B2B Gateway includes pre-packaged, EDI processing mappings that validate and handle the EDI messages and convert EDI messages from partners to XML interface files, which you can then process and move from the gateway to the backend systems.

When partner EDI messages arrive, Cloud B2B Gateway receives and validates the messages and sends functional and technical acknowledgments to the partners. To process the messages to the backend systems, you can create Data Integration mappings.

To send EDI messages to partners, you create Data Integration mappings that extract the information from the backend systems, write the information to the interface files, and move the files from the backend system to the gateway. The gateway enriches the data in the interface files with metadata from the gateway, creates a valid EDI message file for each interface file, and sends the message files to the partners. You can ask to receive acknowledgments from the partner. For EDI X12 messages, the gateway tracks all the acknowledgments that the partner sends.

Cloud B2B Gateway can also process non-EDI files. For custom, non-EDI files, you create the mappings that process the files for all the stages of the order-to-cash and procure-to-pay processes. For the exchange of custom files with your partners you can use any type of file as the interface file.

For inbound Excel, TXT, and CSV files, instead of creating custom mappings to process the incoming files, you can use Informatica Intelligent Structure Discovery to automatically discover the file structure and create CSV interface files. You can then create custom mappings that process the data to your backend system.

Cloud B2B Gateway generates events as it processes messages and files, to help you track and monitor the data that you exchange with partners. The event list provides full visibility into the data exchange and alerts you to errors that might occur.

Order-to-cash example

You are a supplier that receives purchase orders from a retail chain. Message exchanges between you and the retail chain can include sending and receiving messages, for example, receiving purchase orders and payment or order remittance advices and sending functional acknowledgments and invoices.

Procure-to-pay example

You place orders with an Internet supplier. Message exchanges between you and the supplier can include sending and receiving messages, for example, sending purchase orders and payment or order remittance advices and receiving purchase order acknowledgments and invoices.

Data exchange setup

To set up the data exchanges with the retail chain and the Internet supplier, you perform the following tasks:

1. In Cloud B2B Gateway, create a new customer for the retail chain.
2. Define the type of messages that you exchange with the customer and the communication protocols through which you exchange data with the customer, select whether to send functional acknowledgments, assign mappings to the inbound and outbound flows as applicable, and define messaging schedules.
3. If you want Cloud B2B Gateway to process inbound messages from the gateway to the backend system, create a Data Integration mapping where Cloud B2B Gateway is the source and the backend system is the target. In Cloud B2B Gateway, in partner management, select the mapping as the process-to-backend mapping.
4. For outbound messages, create an Data Integration mapping where the backend system is the source and Cloud B2B Gateway is the target. You create a mapping that handles all message types and versions that you send to the customer. In Cloud B2B Gateway, in partner management, select the mapping as the process-from-backend mapping.
5. Save the new customer.
6. Create a new supplier for the Internet supplier.

Partners

The organization partners are customers that place orders with the organization and suppliers with which the organization places orders.

A partner can be either a customer or a supplier.

When you define a partner in Cloud B2B Gateway, you define the details of your exchanges with the partner as agreed upon between you and the partner. Exchange details include the type of messages that you exchange with the partner, the communication protocols through which you exchange data with the partner, whether or not you send functional and technical acknowledgments to the partner, the mappings that you use for inbound and outbound flows, as applicable, and the messaging schedules.

Inbound and outbound flows

For each partner, you can define an inbound flow, an outbound flow, or both.

If you define an inbound flow, Cloud B2B Gateway uses the flow details to handle incoming messages and files and to send acknowledgements in response. If you define an outbound flow, Cloud B2B Gateway uses flow details to handle outgoing messages and files.

When you define an inbound or an outbound flow, you configure a connection, select the mappings, and select a schedule for the flow.

Data Integration mappings and tasks

Cloud B2B Gateway uses Data Integration mappings and mapping tasks to process EDI messages and custom files that you exchange with your partners.

To run the mappings when handling incoming or outgoing messages and files, Cloud B2B Gateway creates temporary mapping tasks based on the mappings. Intermediate files (interface files) that an incoming message processing flow creates can be processed by one or multiple mapping tasks.

If system resources are limited, you can select to minimize the number of process-to-backend tasks for your organization. For all the XML interface files created during a single inbound processing flow for an EDI X12, EDIFACT, or custom file, Cloud B2B Gateway can group the process-to-backend mapping tasks and create a single mapping task.

If no files are found in a source directory for an inbound message flow, processing is not triggered and the mapping task is not generated.

At the end of a message or file flow, Cloud B2B Gateway deletes all temporary tasks that it created for the flow.

Schedules

Define schedules to run partner inbound flow, outbound flow, or both.

Create schedules in Administrator. For information about defining schedules, see *Schedules* in the Administrator service help.

To create, define, and update schedules for partner flows, users must have the appropriate privileges for Schedule and Schedule job. For more information about user privileges, see the Administrator help.

EDI and EDIFACT messages

Cloud B2B Gateway uses Data Integration mappings to validate and handle EDI and EDIFACT message exchanges between the organization and its partners.

When you exchange EDI and EDIFACT messages with your partners, Cloud B2B Gateway creates EDI processing mappings in Data Integration to exchange and process messages between partners and Cloud B2B Gateway. You create custom mappings for data transfer between Cloud B2B Gateway and the backend system.

Custom files with custom mappings

For partners that do not use EDI, you can use Cloud B2B Gateway to validate and handle exchanges of any type of file between the organization and the partners.

To exchange custom files with partners you create custom Data Integration mappings.

Cloud B2B Gateway generates a mapping task to process custom files to the backend.

To simplify the handling for incoming Excel, TXT, and CSV files, you can use Informatica Intelligent Structure Discovery to automatically discover file structures and create an interface file. Intelligent Structure Discovery uses artificial intelligence to automate structure discovery for files that do not follow industry standards.

Inbound custom files with Intelligent Structure Discovery

For inbound Excel, TXT, and CSV files you can use Informatica Intelligent Structure Discovery to automatically discover the file structure.

Intelligent Structure Discovery creates CSV interface files on the Cloud B2B Gateway document store. You can then define a custom mapping to process the data from the document store to the backend system.

Using Intelligent Structure Discovery for an inbound partner flow eliminates the need to create an inbound custom mapping for the flow.

Connections

When you define a partner you configure a connection for each of the partner flows, an inbound connection for the inbound flow and an outbound connection for the outbound flow.

In the inbound connection, you define the source from where Cloud B2B Gateway picks up files. In the outbound connection, you define the target where Cloud B2B Gateway places the files for the partner.

Cloud B2B Gateway processes

Cloud B2B Gateway processes messages and files that you exchange with your trading partners.

When you receive partner messages and files, Cloud B2B Gateway runs an inbound process flow. When you send messages and files to partners, Cloud B2B Gateway runs an outbound process flow.

Processes for EDI X12 and EDIFACT messages

When you exchange EDI and EDIFACT messages with your partners, Cloud B2B Gateway runs the pre-packaged EDI processing mappings and any custom mappings that you assigned to the partner.

The pre-packaged EDI processing mappings that Cloud B2B Gateway provides support EDI message types for inbound and outbound flows, based on the type of process with the partner, EDI X12 or EDIFACT message exchange.

EDI X12 messages

The pre-packaged EDI processing mappings support the following message types for EDI X12 messages:

Message Description	Message Type	Order-to-Cash Process	Procure-to-Pay Process
Air Freight Details and Invoice	110	Outbound flow	Inbound flow
Return Merchandise Authorization and Notification	180	Inbound flow	Outbound flow
Motor Carrier Load Tender	204	Outbound flow	Inbound flow
Motor Carrier Freight Details and Invoice	210	Outbound flow	Inbound flow
Transportation Carrier Shipment Status Message	214	Inbound and outbound flows	Inbound and outbound flows
Logistics Service Response	220	Outbound flow	Inbound flow

Message Description	Message Type	Order-to-Cash Process	Procure-to-Pay Process
Account Assignment/ Inquiry and Service/ Status	248	Inbound and Outbound flow	Inbound and Outbound flow
Rail Carrier Shipment Information	404	Outbound flow	Inbound flow
Rail Carrier Freight Details and Invoice	410	Outbound flow	Inbound flow
Invoice	810	Outbound flow	Inbound flow
Credit/Debit Adjustment	812	Inbound and outbound flows	Inbound and outbound flows
General Request, Response or Confirmation	814	Inbound and Outbound flow	Inbound and Outbound flow
Cryptographic Service Message	815	Inbound and outbound flows	Inbound and outbound flows
Organizational Relationships	816	Inbound and outbound flows	Inbound and outbound flows
Remittance Advice	820	Inbound flow	Outbound flow
Lockbox	823	Outbound flow	Inbound flow
Application Advice	824	Inbound and outbound flows	Inbound and outbound flows
Planning Schedule with Release Capability	830	Inbound flow	Outbound flow
Price/Sales Catalog	832	Outbound flow	Inbound flow
Procurement Notices	836	Inbound flow	Outbound flow
Product Transfer Account Adjustment	844	Inbound flow	Outbound flow
Price Authorization Acknowledgment/ Status	845	Outbound flow	Inbound flow
Inventory Inquiry/ Advice	846	Outbound flow	Inbound flow
Response to Product Transfer Account Adjustment	849	Outbound flow	Inbound flow

Message Description	Message Type	Order-to-Cash Process	Procure-to-Pay Process
Purchase Order	850	Inbound flow	Outbound flow
Product Activity Data	852	Inbound flow	Outbound flow
Purchase Order Acknowledgment	855	Outbound flow	Inbound flow
Advance Ship Notice	856	Outbound flow	Inbound flow
Purchase Order Change Request	860	Inbound flow	Outbound flow
Receiving Advice/ Acceptance Certificate	861	Inbound flow	Outbound flow
Shipping Schedule	862	Inbound flow	Outbound flow
Text Message	864	Inbound and Outbound flow	Inbound and Outbound flow
Purchase Order Change Acknowledgment/ Request	865	Outbound flow	Inbound flow
Product Transfer and Resale Report	867	Inbound flow	Outbound flow
Order Status Report	870	Inbound and Outbound flow	Inbound and Outbound flow
Grocery Products Purchase Order	875	Inbound flow	Outbound flow
Grocery Products Invoice	880	Inbound and Outbound flow	Inbound and Outbound flow
Item Maintenance	888	Outbound flow	Inbound flow
Warehouse Shipping Order	940	Outbound flow	Inbound flow
Warehouse Stock Transfer Shipment Advice	943	Outbound flow	Inbound flow
Warehouse Stock Transfer Receipt Advice	944	Outbound flow	Inbound flow
Warehouse Shipping Advice	945	Inbound and outbound flows	Inbound and outbound flows

Message Description	Message Type	Order-to-Cash Process	Procure-to-Pay Process
Warehouse Inventory Adjustment Advice	947	Inbound and outbound flows	Inbound and outbound flows
EDI Functional Acknowledgment	997	Inbound and outbound flows	Inbound and outbound flows
EDI Technical Acknowledgment	TA1	Inbound and outbound flows	Inbound and outbound flows

EDIFACT messages

The pre-packaged EDI processing mappings support the following message types for EDIFACT messages:

Message Description	Message Type	Order-to-Cash Process	Procure-to-Pay Process
Invoice	INVOIC	Outbound flow	Inbound flow
Remittance Advice	REMADV	Inbound flow	Outbound flow
Planning Schedule with Release Capability	DELFOR	Inbound flow	Outbound flow
Purchase Order	ORDERS	Inbound flow	Outbound flow
Purchase Order Acknowledgment	ORDRSP	Outbound flow	Inbound flow
Advance Ship Notice	DESADV	Outbound flow	Inbound flow
Purchase Order Change Request	ORDCHG	Inbound flow	Outbound flow
Purchase Order Change Acknowledgment/ Request	ORDRSP	Outbound flow	Inbound flow
EDIFACT Acknowledgment	CONTRL	Inbound and outbound flows	Inbound and outbound flows
Instruction to Dispatch	INSDES	Inbound flow	Outbound flow
Order Status Report	OSTRPT	Outbound flow	Inbound flow
Receiving Advice	RECADV	Inbound flow	Outbound flow

Message Description	Message Type	Order-to-Cash Process	Procure-to-Pay Process
Balance of payment information from customer	BOPINF	Outbound flow	Inbound flow
Price/sales catalogue message	PRICAT	Inbound flow	Outbound flow

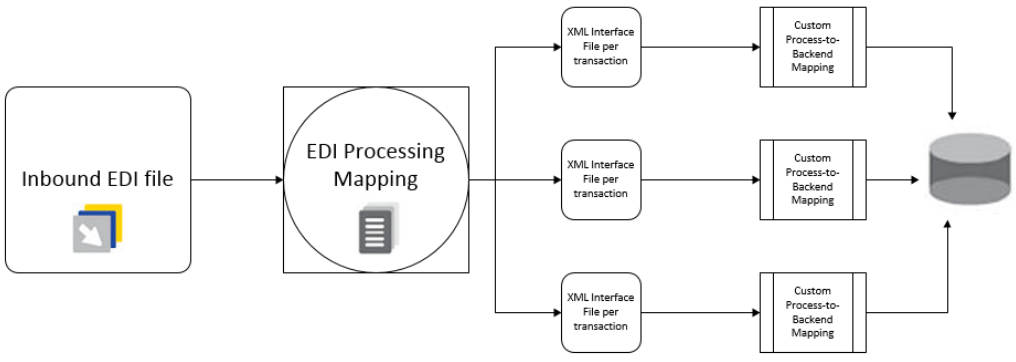
Inbound process for EDI messages

To receive messages that a partner sends to the organization, Cloud B2B Gateway runs an inbound flow according to the defined schedule.

The inbound flow for EDI messages includes the following stages:

1. When an inbound process runs, Cloud B2B Gateway creates a temporary mapping task in Data Integration. The task is based on the Cloud B2B Gateway pre-packaged, EDI processing mapping. The source and target of the task are based on the source and target details from the partners definition metadata. The source of the mapping is the location from where to read the incoming messages, and the target of the mapping is an interface file on Cloud B2B Gateway.
2. The task converts the EDI messages to XML interface files, one file for each functional group, and places the files on Cloud B2B Gateway.
3. Cloud B2B Gateway validates the incoming messages. If any of the validations fail, Cloud B2B Gateway rejects the message and creates an error event.
4. If during partner configuration you selected to send technical or functional acknowledgments to the partner, Cloud B2B Gateway sends an EDI functional and technical acknowledgment to the partner.
5. If during partner configuration you assigned a process-to-backend custom mapping for the inbound flow, Cloud B2B Gateway creates a temporary mapping task that is based on the defined mapping in Data Integration and runs the task. If you did not assign a mapping, the inbound process ends with the placement of the interface files on Cloud B2B Gateway. You can use your own method to processes the interface files to your backend systems.
6. Cloud B2B Gateway deletes the temporary Data Integration tasks.

The following image shows the processing flow for an inbound EDI file:



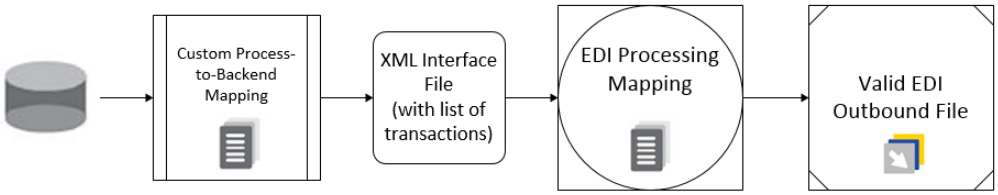
Outbound process for EDI messages

To send messages to partners, Cloud B2B Gateway runs an outbound process flow according to the defined schedule.

The outbound flow for EDI messages includes the following stages:

1. When an outbound process starts, Cloud B2B Gateway first runs the custom process from the backend mapping that you defined in the partner definition. Cloud B2B Gateway creates a temporary mapping task in Data Integration based on the custom mapping and runs the task. The output of the task should be interface files that include the messages to send to your partners. The task places the files on Cloud B2B Gateway.
2. Cloud B2B Gateway uses the pre-packaged, EDI processing mapping to read the interface files, and then enriches the data in the interface file with the partner metadata and creates valid EDI messages. Cloud B2B Gateway creates a temporary mapping task in Data Integration based on the EDI processing mapping. The task source and target details are based on the partner definition metadata. The source of the mapping is the interface files, and the target of the mapping is the location where to send the messages.
3. Cloud B2B Gateway deletes the temporary Data Integration task.

The following image shows the processing flow for an outbound EDI file:



Processes for custom files with custom mappings

When you exchange custom, non-EDI files with your partners, you create custom mappings that process the files, and then assign the mappings to the partner.

Cloud B2B Gateway runs the mappings that you assign to the partner according to the defined schedule.

Inbound process for custom files with custom mappings

To receive and process custom, non-EDI files that a partner sends to the organization, Cloud B2B Gateway runs the inbound flow that is defined for the partner according to the defined schedule.

You can use one of the following methods to process inbound custom files:

- Two-step processing, using two custom mappings. An inbound mapping reads the file that the partner sends, processes it, and writes the file to an interface file on the Cloud B2B Gateway document store. A process-to-backend mapping then writes the data to the backend system. When you use two-step processing, you can use a single process-to-backend mapping to process all inbound custom files to your backend system from a single interface file.
- Single-step processing. A single custom mapping reads the file that the partner sends, processes it, and writes the file directly to the backend system. When you use single-step processing, you must write the logic of writing the data to the backend system for every inbound custom file from each partner.

- Intelligent Structure Discovery processing. Use Intelligent Structure Discovery to discover the file structure of a custom input file, and auto-generate a parsing process that creates an interface CSV file with the discovered content. The Intelligent Structure Discovery parsing process replaces a custom inbound mapping. You can also create a custom process-to-backend mapping to process the auto-generated interface file to the backend system.

The inbound flow for custom files includes the following stages:

1. When an inbound process runs, Cloud B2B Gateway creates a temporary mapping task in Data Integration. The task is based on the inbound mapping that you assigned the partner. The source and target of the task are based on the source and target details from the partners definition metadata. The source of the mapping is the location from where to read the incoming files. The target of the mapping can be either an interface file on Cloud B2B Gateway or the backend system.
2. If the target of the inbound mapping is an interface file on Cloud B2B Gateway, and if during partner configuration you assigned a process-to-backend mapping for the inbound flow, Cloud B2B Gateway creates a temporary mapping task that is based on the defined mapping in Data Integration and runs the task. The task writes the data to the backend system. If you did not assign a process-to-backend mapping, the inbound process ends with the placement of the interface file on Cloud B2B Gateway. You can use your own method to write the data to the backend system.
3. If the target of the inbound mapping is the backend system, Cloud B2B Gateway writes the data to the backend system.
4. Cloud B2B Gateway deletes the temporary Data Integration tasks.

Outbound process for custom files

To send custom, non-EDI files to a partner, Cloud B2B Gateway runs the outbound flow according to the defined schedule.

You can use one of the following methods to process outbound custom files:

- Two-step processing, using two custom mappings. A process-from-backend mapping reads the data to send to the partner from your backend system, processes it, and writes the data to an interface file on the Cloud B2B Gateway document store. An outbound mapping then sends the file to the partner. When you use two-step processing, you can use a single outbound mapping to process all outbound custom files to all your partners from a single interface file.
- Single-step processing. A single custom mapping reads the data to send to the partner from the backend system, processes it, and sends the file directly to the partner. When you use single-step processing, you must write the logic of reading the data from the backend system for every custom file to send to each partner.

The outbound flow for custom files includes the following stages:

1. When an outbound process starts, Cloud B2B Gateway first runs the custom process from the process-from-backend mapping that you defined in the partner definition and reads the data from the backend system. Cloud B2B Gateway creates a temporary mapping task in Data Integration based on the mapping and runs the task. The output of the task can be either an interface file on Cloud B2B Gateway or the location where to send the files.
2. If the target of the process-from-backend mapping is an interface file on Cloud B2B Gateway, the task writes the data to the interface file. If the target of the mapping is the location where to send the files, Cloud B2B Gateway sends the files to the partner.
3. If the target of the process-from-backend mapping is an interface file on Cloud B2B Gateway, and if during partner configuration you assigned an outbound mapping for the flow, Cloud B2B Gateway creates a temporary mapping task that is based on the defined mapping in Data Integration and runs the task. The task sends the files to your partner. If you did not assign an outbound mapping, the outbound

process ends with the placement of the interface files on Cloud B2B Gateway. You can use your own method to send the files to your partner.

4. Cloud B2B Gateway deletes the temporary Data Integration task.

Process for inbound custom files with Intelligent Structure Discovery

For inbound Excel, TXT, and CSV files you can use Intelligent Structure Discovery to automatically discover the structure of the files and generate the interface files. You can create a custom process-to-backend mappings to process the interface files to the backend system.

Cloud B2B Gateway runs the structure and the custom mapping that you assign to the partner according to the defined schedule.

Accessing Cloud B2B Gateway

Log in to Cloud B2B Gateway from the **My Services** page in Informatica Intelligent Cloud Services.

Before you log in to Cloud B2B Gateway for the first time, the administrator sets up your organization in Informatica Intelligent Cloud Services and then sets up the organization in Cloud B2B Gateway. If, when you log in to Cloud B2B Gateway for the first time, the **Organization Cloud Setup** dialog box shows, it is an indication that your administrator did not perform the process of provisioning your organization to the gateway. Contact your administrator or follow the instructions on the screen. For details, see "Organization management" on page 22.

You log in to Cloud B2B Gateway with your Informatica Intelligent Cloud Services credentials.

1. On the Informatica Intelligent Cloud Services login page, enter your Informatica Intelligent Cloud Services user name and password.
2. Click **Log In**.

   The Informatica Intelligent Cloud Services **My Services** page appears.
3. Select **B2B Gateway**.

   The Cloud B2B Gateway Overview page appears. If no entities exist in Cloud B2B Gateway, the Overview page displays a Welcome page. If Cloud B2B Gateway contains entities such as applications, topics, publications, or subscriptions, the Overview page displays the Cloud B2B Gateway Overview diagram. The Overview diagram provides a visual overview of the existing entities, grouped into categories.

   Note: The **B2B Gateway** link appears on the **My Services** page if your organization has the required licences. If the link doesn't appear on the **My Services** page, contact your administrator.

Tip: If you experience scrolling or display issues, adjust the display. For example, adjust the browser's zoom level.

CHAPTER 2

Gateway Administration

This chapter includes the following topics:

- Gateway Administration Overview, 22
- Organization management, 22
- User roles, 25
- EDI message customization , 26
- Message Schema Upload, 29
- Asset migration, 30

Gateway Administration Overview

Before the organization can use Cloud B2B Gateway, you must set up an organization in Informatica Intelligent Cloud Services and then set up the organization in Cloud B2B Gateway.

After you set up the organization in Informatica Intelligent Cloud Services, you can do one or more of the following:

- If user roles are defined for the organization in Informatica Intelligent Cloud Services, verify that users have privileges to perform the required actions in Informatica Intelligent Cloud Services.
- Manage transformation services for EDI message customization.
- Upload message schemas to Informatica Intelligent Cloud Services.
- Migrate assets from one organization into another organization, including partners and monitoring rules.

Organization management

Before the organization can use Cloud B2B Gateway, you must set up an organization in Informatica Intelligent Cloud Services and then set up the organization in Cloud B2B Gateway.

When you set up the organization in Cloud B2B Gateway, Cloud B2B Gateway creates connections in Informatica Intelligent Cloud Services, uploads the XML schema files to use in custom mappings to Data Integration, and creates the Cloud B2B Gateway document store for the organization. The setup process might take a few minutes to complete.

Warning: When you set up the organization in Cloud B2B Gateway, Cloud B2B Gateway creates the connections **B2B EDI Gateway**, **B2B EDI Gateway Endpoint**, and **B2B Gateway Document Store** in the

organization in Informatica Intelligent Cloud Services. Do not rename or edit these connections. Editing a connection or changing a connection name might result in errors at run time.

Before you begin

Before you set up the organization in Cloud B2B Gateway verify that the following conditions exist in Informatica Intelligent Cloud Services.

Configuration

From the **Configure** menu, under **Runtime Environments**, verify that the Secure Agent is running.

Administration

From the **Administer** menu, under **Licenses**, verify that following conditions exist:

License Category	Required Condition
Application license	A valid Mappings license.
Feature license	A valid DT XML Processing license.
REST API license	**Maximum Concurrent Sessions** is set to a high value, for example, 100 sessions.
Connector license	A valid B2B EDI Gateway connector.
Connector license	A valid B2B EDI Gateway Endpoint connector.
B2BProcessor license	A valid B2BProcessor package.
Bundle license	A valid EDI Gateway bundle.
Package license	A valid DataTransformation package.
Package license	A valid B2BEDIGateway package.
Package license	A valid UDTforHierarchy package.

Proxy Settings

If your organization uses an outgoing proxy server to connect to the internet, set the following JVM options on the Secure Agent:

Name	Value
JVMOption1	-Dhttp.proxyHost=<proxy host>
JVMOption2	-Dhttp.proxyPort=<proxy port>
JVMOption3	-Dhttp.useProxy=true
JVMOption4	-Dhttp.proxyUser=<proxy user name>
JVMOption5	-Dhttp.proxyPassword=<proxy password>

After the Secure Agent restarts, check the agent core log file to verify that the correct proxy server is used. The agent core log file is the following file:

```
<Secure Agent installation directory>\apps\agentcore\agentcore.log
```

To find the proxy information, search for "proxy" in the log file.

Setting up the organization in Cloud B2B Gateway

Set up the organization in Cloud B2B Gateway.

Before you can set up an organization in Cloud B2B Gateway you must set up the organization in Informatica Intelligent Cloud Services. For details about setting up an organization, see the *Informatica Intelligent Cloud Services Administrator* help.

1. Access Cloud B2B Gateway and accept the license agreement.

   The **Organization Cloud Setup** dialog box appears.

2. Define the required settings and then click **Save**.

Property	Description
Organization Name	Name of the organization in Informatica Intelligent Cloud Services. Appears in view only mode.
Organization ID	ID of the organization in Informatica Intelligent Cloud Services. Appears in view only mode.
Informatica Cloud User	Name of the Informatica Intelligent Cloud Services user to use at run time. The user must have all the permissions that are required for Cloud B2B Gateway administrators, Cloud B2B Gateway users, and Data Integration users. For more information about the required permissions, see "User roles" on page 25.
Informatica Cloud Password	Password for the Informatica Intelligent Cloud Services user to use at run time.
Runtime Environment	Informatica Intelligent Cloud Services Secure Agent runtime environment to use at run time.
X12 Interchange Qualifier	Required if you exchange X12 messages with your partners. Interchange qualifier of the organization to use in outbound X12 messages. If you want Cloud B2B Gateway to use a different qualifier in outbound messages for specific partners, you can provide the qualifier to use for the partner when you create or edit the partner.
X12 Interchange ID	Required if you exchange X12 messages with your partners. Interchange identifier of the organization to use in outbound X12 messages. If you want Cloud B2B Gateway to use a different identifier in outbound messages for specific partners, you can provide the identifier to use for the partner when you create or edit the partner.
EDIFACT Interchange Qualifier	Required if you exchange EDIFACT messages with your partners. Interchange qualifier of the organization to use in outbound EDIFACT messages. If you want Cloud B2B Gateway to use a different qualifier in outbound messages for specific partners, you can provide the qualifier to use for the partner when you create or edit the partner.

Property	Description
EDIFACT Interchange ID	Required if you exchange EDIFACT messages with your partners. Interchange identifier of the organization to use in outbound EDIFACT messages. If you want Cloud B2B Gateway to use a different identifier in outbound messages for specific partners, you can provide the identifier to use for the partner when you create or edit the partner.
Document Store	File directory inside the organization where Cloud B2B Gateway stores all the documents that the organization exchanges with partners, for tracking purposes. The directory must be accessible to the runtime environment. Do not create the document store directory in the Secure Agent installation home directory or any subdirectory. You must enter an absolute path to the directory.
Minimize number of processing tasks	Cloud B2B Gateway can group prcoess-to-backend mapping tasks for an inbound flow, and create a single mapping task to handle all the XML interface files created in during EDI X12, EDIFACT, or custom file processing. Recommended only when system resources are limited.
Rotate Key	Click **Rotate Key** to rotate the encryption key used for data encryption.

Warning: When you set up the organization in Cloud B2B Gateway, Cloud B2B Gateway creates the connections **B2B EDI Gateway**, **B2B EDI Gateway Endpoint**, and **B2B Gateway Document Store** in the organization in Informatica Intelligent Cloud Services. Do not rename or edit these connections. Editing a connection or changing a connection name might result in errors at run time.

Editing organization settings in Cloud B2B Gateway

Edit the organization settings in Cloud B2B Gateway.

1. Log in to Cloud B2B Gateway with your Informatica Intelligent Cloud Services credentials.
2. Click **Settings** in the upper right corner of the screen.

   The **Organization Cloud Setup** dialog box shows.
3. Edit the required settings and then click **Save**.

User roles

If user roles are defined for the organization in Informatica Intelligent Cloud Services, verify that users have privileges to perform the required actions in Informatica Intelligent Cloud Services.

Privileges determine the access a user has at the object level. You can configure privileges for object types at the user group-level or configure privileges for specific objects in object-level privileges.

For more information about user roles and privileges, see the Administrator help.

Required privileges for Cloud B2B Gateway administrators

To set permissions for users in Cloud B2B Gateway, the Cloud B2B Gateway administrator needs the following privileges:

B2B Gateway service

Set Permission privileges for Customer, Supplier, and Monitoring Rule.

Administrator service

Set Permission privileges for Schedules and Scheduler Job.

Required permissions for Cloud B2B Gateway users

To perform actions in Cloud B2B Gateway, Cloud B2B Gateway users need the following privileges:

B2B Gateway service

Create, Read, Update, Delete, and Run privileges for Customer and for Supplier.

Create, Read, Update, and Delete privileges for Monitoring Rule.

Administrator service

Create, Read, Update, Delete, and Run privileges for Schedule and Scheduler job.

Required privileges for Data Integration users

To perform actions in Data Integration, Cloud B2B Gateway users need the following privileges:

Administrator service

Read privileges for Secure Agent and Secure Agent Group.

Data Integration service

Read, create, update, and delete privileges for Connection, Hierarchical Schema, Intelligent Structure Task, Mapping, Mapping Task, and Mapplet.

EDI message customization

Your organization or your partners might choose to customize EDI messages by adding or removing elements.

For example, consider an online furniture vendor that uses EDI 850 Purchase Order messages. The EDI 850 message structure defines hundreds of data elements. The clothing business uses standard elements such as model, color, and size, and a custom element for the wood type. It does not need batch number or expiration date. To process customized EDI messages from this vendor, you can remove the unneeded elements and add the fabric type element to a custom transformation service.

You can create a customized service to process the customized messages using the Informatica Library Customization Tool. Cloud B2B Gateway manages the customized services in the Cloud B2B Gateway repository and implements these services for specific partners and messages.

EDI message customization process

Cloud B2B Gateway mappings include transformation services that convert inbound EDI messages into interface files, or interface files into outbound EDI messages. A transformation service is configured to convert a specific message type in its standard format. To process a customized message, you create a custom transformation service.

You can download an out-of-the-box transformation service and use it as a template. You use the Library Customization Tool to configure the transformation service components according to the customized message structure. After you complete your changes, you create a custom transformation service in Cloud B2B Gateway and upload the edited service.

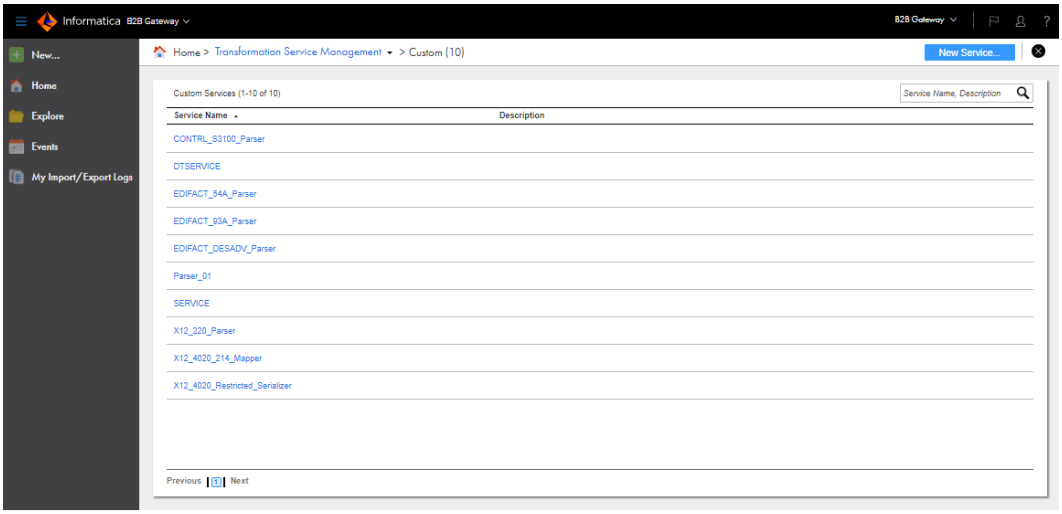
When you define a partner in Cloud B2B Gateway, you can associate a custom transformation service with a specific EDI message that is sent from or to the partner. Cloud B2B Gateway runs the service when a flow runs for the partner for the message associated with the service.

Transformation service management

The **Transformation Service Management** page displays transformation services in two views: **Custom** and **Out-of-the-Box**. By default, the **Custom** view is displayed. Use the **Custom** view to create, edit, search, download, or delete custom transformation services. Use the **Out-of-the-Box** page to find and download out-of-the-box transformation services.

To access the **Transformation Service Management** page, from the upper-right hand corner of the home page, click the **Transformation Service Management**.

The following image shows the **Transformation Service Management** page with the default **Custom** view:



You create a custom transformation service in the **Custom** view. When you create the custom transformation service, you upload a service that you created externally.

The **Transformation Service Management** page displays the following properties:

Service Name

Name of the transformation service.

Description

Description of the transformation service.

Note: You must have administrative privileges in order to work with transformation services.

Service customization process

To create a custom transformation service, perform the following steps:

1. In Cloud B2B Gateway, search for and download an out-of-the-box transformation service for the standard form of the EDI message.
2. Edit the service with Data Transformation, using the Library Customization Tool. For details, see the *Data Transformation User Guide*.
3. Export or deploy the edited transformation as a service.
4. In Cloud B2B Gateway, create a transformation service and upload the edited service.

Note: The name of the custom transformation service must be unique. You must change the name of the out-of-the-box service when you create the new service in Cloud B2B Gateway. The name is case sensitive.

Searching for a transformation service

Custom transformation services and out-of-the-box transformation services are displayed in different views, to ensure that service management is efficient. To search for transformation services in Cloud B2B Gateway, switch to the appropriate view.

1. To search for an out-of-the-box transformation service, click the **Transformation Service Management** menu in the upper left and select **Out-of-the-Box**.
2. Alternatively, to search for a custom transformation service, if needed, click the Transformation Service Management menu in the upper left and select **Custom**.

   Note: The Custom view is the default view.
3. To search for a transformation service, in the **Search** field type the any part of the service name or description.

   The matching services are displayed.

Downloading a transformation service

You can download the transformation services displayed in the **Transformation Service Management** page to your local machine.

- To download a transformation service, select the row containing the service and then click the **Download** icon.

After you download an out-of-the-box transformation service, you can use the service as a template from which to create a custom transformation service.

Creating a custom transformation service in Cloud B2B Gateway

When you create a custom transformation service object in the **Custom** view of **Transformation Service Management** page, you upload a service that you edited externally.

1. To create a custom transformation service, click **New Service**.
2. Browse to find the directory that contains the transformation service that you created or edited externally.

   If you are using a Chrome browser, select the folder. If you are using an Internet Explorer browser, select all the files in the folder.

   Note: You cannot add a description or any other information before you select a transformation service.
3. Rename the service. The custom transformation service must be unique, and cannot have the same name as an out-of-the-box service name. The name is case sensitive.
4. Optionally, add a description to the service. The description must not contain angled brackets (< or >).
5. You can select to upload the schema that is part of the transformation service.

   By default, this option is enabled.

   The schema is uploaded to Informatica Intelligent Cloud Services as a hierarchical schema. You can use the hierarchical schema with the Hierarchy Parser or Hierarchy Builder transformations in Data Integration mappings.

6. Select the root element for the schema.

   You can select one of the roots used by the out-of-the-box mappings or select a custom root.

7. Click **Save**.

Editing a transformation service

You can edit a custom transformation service in Cloud B2B Gateway.

1. To edit a custom transformation service, select the row containing the service and then click the **Edit** icon.
2. To change the service, browse to find the directory containing the custom transformation service that you want to use.

   If you are using a Chrome browser, select the folder. If you are using an Internet Explorer browser, select all the files in the folder.

   Note: You cannot add a description or any other information before you select a transformation service.

3. You can select to upload the schema that is part of the transformation service.

   By default, this option is enabled.

4. Select the root element for the schema.
5. Click **Save**.

Deleting a transformation service

You can delete a transformation service that is not assigned to a partner. After you assign a transformation service to a partner, you cannot delete it.

- To delete a transformation service, select the row containing the service and then click the **Delete** icon.

  If the transformation schema is used by a mapping in Data Integration, you will get a warning message. You can select whether or not to delete the transformation service.

Message Schema Upload

Process-to-backend and process-from-backend mappings that process EDI X12 and EDIFACT messages use Hierarchy Parser and Hierarchy Builder transformations, respectively.

Before you develop mappings that use the Hierarchy Parser or Hierarchy Builder transformations, you must upload the respective message schemas to Informatica Intelligent Cloud Services.

After you upload the schemas to Informatica Intelligent Cloud Services, they are available for selection during mapping development.

Uploading Message Schemas to Informatica Intelligent Cloud Services

If user groups are defined for the organization in Informatica Intelligent Cloud Services, to perform this task you must have permissions to read, create, and update hierarchical schemas.

1. Click the **Message Schema** link in the upper right corner of the screen.

   The **Message Schema Upload** page appears.

2. Select the file type, EDI X12 or EDIFACT, and then select one or more message types and one or more message versions.

   Note: You can upload message schemas for one file type at a time. To upload both EDI X12 and EDIFACT schemas you must first complete the upload for one file type and then repeat the upload procedure for the second file type.

3. For EDI X12 messages, select whether to use element reference numbers or use element names in XML interface files.

4. Click **Apply**.

   The messages you selected appear in the **Message Schema Upload** page.

5. Click **Upload Message Schemas**.

   Cloud B2B Gateway uploads the selected schemas to Informatica Intelligent Cloud Services. The schemas are available for selection in Data Integration when you develop mappings that use the Hierarchy Parser or Hierarchy Builder transformations.

   Note: Cloud B2B Gateway does not save a list of uploaded schemas. You can view the list of uploaded schemas in the Explore page of Data Integration.

Asset migration

You can migrate assets from one organization to another organization. To migrate assets, you export the assets from the source organization and then import the assets into the target organization.

For example, you might have separate organizations for development, test, and production environments. You create assets in the development organization. After creating the assets, you export them from the development organization and then import them into the test organization. After you test and validate the assets, you export them from the test organization and then import them into the production organization.

You can import and export the following types of assets:

- Customers
- Suppliers
- Monitoring Rules

You can export single assets, groups of assets, or export all of the assets in a project. If you export a project or folder, the file structure remains intact so that when you perform the import in the target organization, you can duplicate the original structure.

Before you migrate an asset from one organization to another, ensure that you meet the following requirements:

- The source and target organizations must have the Import/Export license.
- The target organization must have the required licenses for the assets that you want to import.

- You must have a user account in the source and target organizations with a role that has import and export privileges, such as the Admin or Designer role.
- To export or import assets in a sub-organization, log in to the sub-organization. If you have administrator privileges in the parent organization you can also switch to the sub-organization and export or import Data Integration assets.
- You have completed the cloud organization setup for both the source and target organizations.

Dependent objects

Dependent objects are assets that are required by other assets.

For example, a mapping or an Intelligent Structure Discovery model that is used by a partner inbound or outbound flow are dependent objects.

When you set up an export, you have the option to include or exclude dependent objects in the export file.

You might want to include dependent objects if they do not exist in the target organization. Or, you might want to include dependent objects if you want to replace the dependent objects in the target organization with updated versions from the source organization. If you choose to include dependent objects, the export file includes dependent objects for all of the assets that you include in the export. When you configure the import, you can choose which dependent assets to import.

You might want to exclude an asset's dependent objects if the objects exist in the target organization and you do not want to replace them.

Asset export

When you export assets, Informatica Intelligent Cloud Services creates an export ZIP file that contains the assets that you selected for export.

You can select individual assets to export, or you can select an entire project or folder. When you export a project or folder, the export file includes all of the assets in the project or folder.

Note: Informatica recommends that you include no more than 1000 objects in an export file.

Export files

The export file includes a spreadsheet that lists the objects within the file.

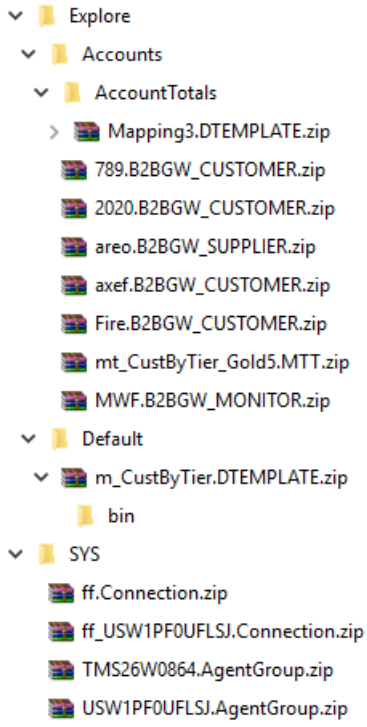
The following image is an example of an export spreadsheet:

objectPath	objectName	objectType	id
/Explore/Default	MWF	B2BGW_MONITOR	2nbWzcJy7sCeEH4ZNZ5y4i
/Explore/Default	789	B2BGW_CUSTOMER	8nqIYqkUIMhkWvaec3chiM
/Explore/Default	Fire	B2BGW_CUSTOMER	9o9Kqye5K5JhpO2AJEXyw9
/Explore/Default	2020	B2BGW_CUSTOMER	9pLvrttb9xwcZET2yQPsSL
/Explore/Default	Freight88	B2BGW_SUPPLIER	07qCe4zpPcGgdyGNIFH1QE
/Explore	Default	Project	2zK82a5p9MTg8CxhuyHBI1
/Explore/Default	ref	B2BGW_CUSTOMER	iFtWDi7gl6BiMmZH8gyGgl

Export file structure

The export file retains the file structure of the source organization's **Explore** page for projects, folders, and assets.

The following image show the structure of an export file:



Object names

The following table lists the asset types and the associated extensions appended to Cloud B2B Gateway asset names:

Asset Type	Extension
Customer	B2BGW_CUSTOMER
Supplier	B2BGW_SUPPLIER
Monitoring Rule	B2BGW_MONITOR

Exporting assets

You can select a single asset, multiple assets, or a project to export.

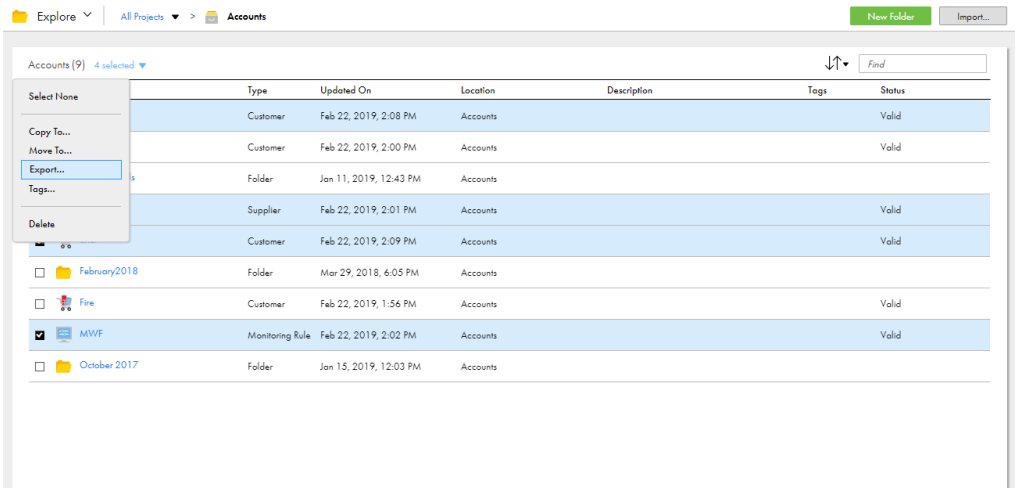
To include multiple assets, you can either select each asset within a folder or select a project or folder to export all of its assets. If you export a project, during import you can import the entire project or import only the assets that you select.

1. Log in to the source organization.
2. On the **Explore** page, navigate to the assets that you want to export.
3. Select the assets that you want to export.

   To export a single asset or project, select the asset or project, and then click **Actions** and select **Export**.

   To export multiple assets, select the check box to the left of each asset that you want to export. Or, select the check box for each project or folder that contains the assets that you want to export. From the selection menu, select **Export**.

The following image shows the selection menu with multiple assets selected:



4. On the **Export Assets** page, change the job name or leave the default.
5. Select whether to include dependent objects for the selected assets.
6. Click **Export**.
7. To see the progress of the job, select **My Import/Export Logs** from the navigation bar and then select **Export** from the menu at the top of the page. Click the name of the log to open the log details page.
8. To download the export file when the job completes, on the log details page, click the export file name.

   Tip: You can quickly open the log details page for a completed export job in **Notifications**. When the export process is complete, a message appears in **Notifications**. Click the link in the message to open the log details page.

Asset import

You can import all of the assets in an export file or select the assets that you want to import.

When you import assets, you specify the following information:

- The assets in the export file that you want to import and the projects in which to import them.
- Whether to overwrite assets in the target project with assets in the export file when there is a name conflict.

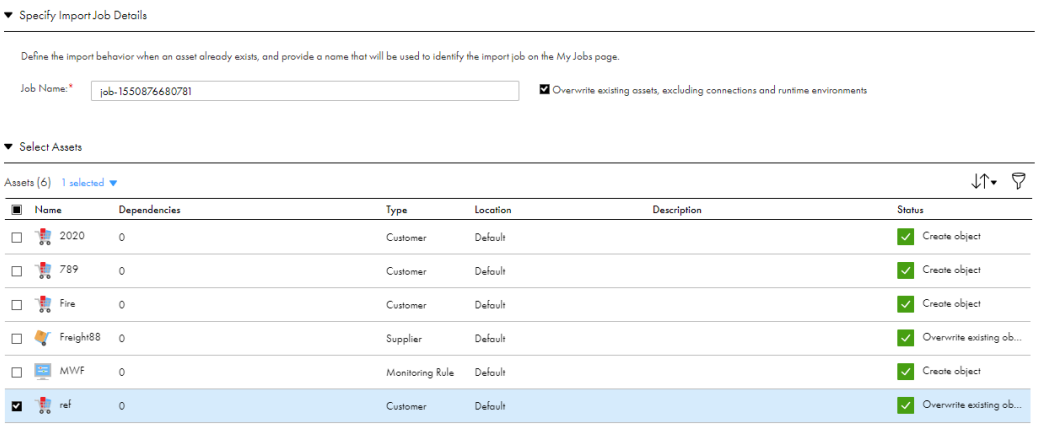
The **Import Assets** page lists the assets that are in the export file. You can select which assets you want to import, and then specify which project to import the assets to. You can accept the default project, which is the same project name as the source project, or you can select a different project. If the project does not exist in the target organization, Informatica Intelligent Cloud Services creates it.

The target organization must have all of the required licenses for the assets being imported.

You can specify how Informatica Intelligent Cloud Services handles asset name conflicts when the export file contains assets with the same name as assets in the target project. You can choose whether to overwrite the assets in the target project. If you choose not to overwrite the assets, Informatica Intelligent Cloud Services uses the existing assets in the target project.

To see how the import handles any asset name conflicts before you start the import job, you can test the import on the **Import Assets** page before you import the assets. The import action displays in the **Status** column for each asset.

The following image shows a list of assets and the import action to be performed when overwriting existing assets is enabled:



When you import partners into the target organization, the partner name and number must be unique. You cannot import a partner into an organization where a partner with the same partner name or partner number exists.

When you migrate partners with custom transformation services, the partner is imported with the custom transformation service link, but the transformation service is not migrated with the partner. If a custom transformation service of the same name exists in the target organization, the partner will use the custom transformation service in the target organization.

Importing assets

Import assets from a Informatica Intelligent Cloud Services export file.

1. Log in to the target organization.
2. On the **Explore** page, navigate to **All Projects** and click **Import**.
3. On the **Import Assets** page, navigate to the export file and click **Open**, or drag the zip file from the Downloads folder in Windows.

   The **Import Assets** page lists the assets in the file.
4. Optionally, change the job name.
5. Choose whether to overwrite existing assets with the assets in the import.

   If you choose to overwrite existing assets, when an asset has the same name as an asset in the target project, the asset replaces the existing asset in the target project.

   If you do not choose this option, if an asset with the same name exists in the target project, the asset does not import.
6. Select the assets that you want to import.

   If the export file contains a project and you want to import the entire project, select all of the assets. Informatica Intelligent Cloud Services creates the project in the source organization.
7. Select the target project or accept the default.
8. Click **Test** to see the potential results of the import.

   In the Select Assets area, the status for each asset shows the action that the service performs when you import the files.

9. If required, revise your selections to resolve any issues in the test results, and then click **Import**.

   You can see the progress of the job on the **My Import/Export Logs** page. When the import process is complete, a message appears in **Notifications**. Click the link in the message to open the log details page and see the results of the import.

Post-import tasks

To complete the migration process you need to perform certain tasks based on the types of assets that you imported.

Perform the following tasks after you import assets:

- Configure connection passwords and security tokens. Informatica Intelligent Cloud Services does not include connection passwords and security tokens in imports for security reasons.
- Recreate and define partner schedules. Informatica Intelligent Cloud Services does not import schedule information and partners are imported with a manual trigger.
- Download any custom transformation services from the source organization and add them into the target organization. Informatica Intelligent Cloud Services does not migrate custom transformation services.

Monitoring imports and exports

You can monitor the imports that are running or have run in your organization. Each time that you import or export objects, Informatica Intelligent Cloud Services creates a log entry for the import or export.

You can view the import and export logs on the following pages:

My Import/Export Logs page

Lists all imports and exports started by the currently logged in user. If you view your exports, you can download the export files from this page.

To open the My Import/Export logs page, in Cloud B2B Gateway, click **My Import/Export Logs**.

Import/Export Logs page

Lists all imports and exports that are running or have run in the organization. If you view exports, you can download the export files from this page.

To open the Import/Export Logs page, open Monitor, click **Import/Export Logs**.

Details page

Displays detailed information about a specific import or export instance. You can also download the import or export instance log file. The log contains instance and object-level details. Logs are available for download for seven days. If you view details for an export instance, you can download the export file from this page. To open the details page, click an import or export instance on the My Import/Export Logs or Import/Export Logs page.

For more information about monitoring imports and exports, see the Monitor service help.

CHAPTER 3

EDI X12 and EDIFACT Messages

This chapter includes the following topics:

- EDI X12 and EDIFACT messages overview, 36
- Interface Files for EDI X12 and EDIFACT Messages, 37
- Data Integration Mappings and Tasks for EDI X12 and EDIFACT Messages , 51
- Managing Partners for EDI X12 and EDIFACT Messages, 59
- Partner Properties for EDI X12 and EDIFACT Messages, 62

EDI X12 and EDIFACT messages overview

Cloud B2B Gateway uses Data Integration mappings and mapping tasks to process EDI and EDIFACT messages that you exchange with your partners.

Inbound EDI X12 and EDIFACT messages

Cloud B2B Gateway runs pre-packaged, EDI processing mappings to handle the connectivity between the partner and the Cloud B2B Gateway document store. You can define custom backend processing mappings to process the interface file that the EDI processing mapping places on the document store to the backend system.

You can define a single process-to-backend mapping to process all interface files, a mapping for each type of file that you want to process, or both mapping types. When an inbound process runs, Cloud B2B Gateway first runs the process-to-backend mappings that are defined for specific message types, and then it runs the process-to-backend mapping that is defined for the inbound flow of the partner.

Outbound EDI X12 and EDIFACT messages

For an outbound flow, you must define custom backend processing mappings to extract and process the data to send to the partner from the backend system to an interface file on the Cloud B2B Gateway document store. You can define a single process-from-backend mapping to process all the messages to the interface file, a mapping for each type of file that you want to process, or both mapping types. When an outbound process runs, Cloud B2B Gateway first runs the process-from-backend mappings that are defined for specific message types, and then it runs the process-from-backend mapping that is defined for the outbound flow of the partner.

Cloud B2B Gateway then runs the pre-packaged, EDI processing mappings to generate valid EDI messages and to handle the connectivity between the document store and the partner.

Note: For both inbound and outbound flows, define each message type in one mapping only. If you define the same message type in both a message-specific backend processing mapping and in the flow's backend processing mapping, Cloud B2B Gateway might run messages of that message type twice. For example, if

you define a process-from-backend mapping for the *810 Invoice* message type for a customer, and *810 Invoice* is also defined in the process-from-backend mapping that is defined for the outbound flow of the customer, Cloud B2B Gateway might run *810 Invoice* messages twice.

Cloud B2B Gateway creates temporary tasks for your custom mappings each time it runs a mapping. At the end of a partner flow, Cloud B2B Gateway deletes all the temporary tasks that it created for the flow.

You can use context parameters in custom mappings to add information from the gateway to inbound and outbound messages and to filter the data in inbound and outbound messages. For example, add the partner name to inbound messages, or filter outbound messages based on partner number.

Interface Files for EDI X12 and EDIFACT Messages

When you exchange EDI X12 and EDIFACT messages with your partners, Cloud B2B Gateway uses XML interface files between the custom mappings and the pre-packaged EDI processing mappings. The XML interface files use the structure and naming conventions from the EDI X12 and EDIFACT standards.

When you receive EDI and EDIFACT messages from partners, the pre-packaged, EDI processing mappings validate the inbound messages and convert them to XML interface files, one file for each message type.

To send messages to partners, you create interface files and place them on the Cloud B2B Gateway. You create an interface file for each type of message that you send to partners. The gateway creates a valid EDI message file for each interface file and sends the message files to the partners.

The structure and elements of an interface file reflect the structure and elements of the relevant EDI X12 or EDIFACT standard for the specific message type. For example:

- For an EDI X12 outbound message for message type 810, the interface file reflects the structure for message type 810.
- For an EDIFACT inbound message for message type ORDERS, the interface file reflects the structure for message type ORDERS.

The pre-packaged schemas for the Cloud B2B Gateway can be loaded into Data Integration during organization provisioning, or any time after provisioning. The pre-packaged schemas are used in the Hierarchy Parser and the Hierarchy Builder transformations to define the expected structure of an inbound or outbound interface file. Each message type and version has its own schema. Before you create an interface file, study the schema for the message type so that you structure the hierarchy correctly.

Structure of the interface file for EDI messages

The interface file for a specific EDI message uses the structure and naming conventions from the EDI X12 or EDIFACT standard for that message.

The EDI interface file contains the following root element:

- EDI X12: `<interchanges>` element.
- EDIFACT: `<interchange>` element.

Within the root element is a message type element, for example `<x12:TS_810>` in EDI X12 or `<TS_INVOIC>` in EDIFACT, and loop elements, segment elements, and data elements. For each element in the standard, there is a matching element in the interface file. The loop, segment, and data elements use the naming conventions in the EDI X12 or EDIFACT standard.

Structure of segment

In the interface file, the segment element uses the segment ID as the name of the corresponding XML element. Data elements within the segment use the reference element ID with the prefix **R** as the name of the corresponding XML element.

The following XML shows the syntax of a segment element that contains data elements:

```
<segment ID>
 <data element reference ID>...</data element reference ID>
 <data element reference ID>...</data element reference ID>
 <data element reference ID>...</data element reference ID>
 ...
</segment ID>
```

Example of an EDI X12 segment

As an example, in the 810 message, the segment ID for the Transaction Set Header segment is ST. The segment contains three data elements. The following table describes the data elements according to the EDI X12 standard:

Name of data element	Reference element ID
Transaction Set Identifier Code	01
Transaction Set Control Number	02
Implementation Convention Reference	03

The following XML represents the Transaction Set Header segment in the interface file:

```
<ST>
  <R01>810</R01>
  <R02>1131</R02>
  <R03>005030</R03>
</ST>
```

Example of an EDIFACT segment

As an example, in the INVOIC message, the segment ID for the UNH Message Header segment is UNH. The segment contains seven data elements. The following table describes the data elements according to the EDIFACT standard:

Name of data element	Reference element ID
Message reference number	010
MESSAGE IDENTIFIER	020
Common access reference	030
STATUS OF THE TRANSFER	040
MESSAGE SUBJECT IDENTIFICATION	050
MESSAGE IMPLEMENTATION GUIDELINE IDENTIFICATION	060
SCENARIO IDENTIFICATION	070

The following XML represents the UNH Message Header segment in the interface file:

```
<UNH>
 <R01>1</R01>
 <R02>
  <R01>DELFOR</R01>
  <R02>D</R02>
  <R03>97A</R03>
  <R04>UN</R04>
  <R05>A09041</R05>
 </R02>
<UNH>
```

Structure of loop

The loop element uses the loop ID from the EDI standard as the name of the corresponding loop XML element with the prefix **LOOP_**.

The following XML shows the syntax of a loop element that contains segments with data elements:

```
<LOOP_loop ID>
  <segment ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   ...
  </segment ID>
  <segment ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   ...
  </segment ID>
  ...
</LOOP_loop ID>
```

Example of an EDI X12 loop

As an example, in the outbound EDI X12 810 message, the Baseline Item Data loop (IT1) contains two segments, IT1 and TX1, and another loop, the Product/Item Description loop (PID).

The following XML represents an IT1 loop in the interface file:

```
<LOOP_IT1>
 <IT1>
  <R01>11</R01>
  <R02>1.000</R02>
  <R03>EA</R03>
  <R04>0.16</R04>
  <R06>VP</R06>
  <R07>HEA006-PHO2S-NL</R07>
 </IT1>
 <TXI>
  <R01>TX</R01>
  <R02>0.00</R02>
  <R06>2</R06>
 </TXI>
 <LOOP_PID>
  <PID>
   <R01>F</R01>
   <R05>12" X 15" ABCDEFGHIJ</R05>
  </PID>
 </LOOP_PID>
</LOOP_IT1>
```

Example of an EDIFACT loop

As an example, in the outbound EDIFACT INVOIC message, loop 26 contains three segments, LIN, IMD_1, and QTY_2, and two other loops, loop 27 and loop 29.

The following XML represents loop 26 in the interface file:

```
<LOOP_26>
 <LIN>
   <R01>3</R01>
   <R02></R02>
      <R03>
          <R01>4711,003</R01>
      </R03>
 </LIN>
 <IMD_1>
   <R01>F</R01>
   <R03>
       <R01></R01>
       <R02></R02>
       <R03></R03>
       <R04>replacementvalve</R04>
   </R03>
 </IMD_1>
 <QTY_2>
   <R01>
       <R01>47</R01>
       <R02>3</R02>
       <R03>PCE</R03>
   </R01>
 </QTY_2>
 <LOOP_27>
   <MOA_6>
       <R01>
           <R01>66</R01>
           <R02>7,5</R02>
       </R01>
   </MOA_6>
 </LOOP_27>
 <LOOP_29>
       <PRI>
           <R01>
               <R01>AAA</R01>
               <R02>2.5</R02>
           </R01>
       </PRI>
 </LOOP_29>
</LOOP_26>
```

Multiple loops with the same ID

Occasionally the EDI standard contains different loops with the same loop ID. In the interface files these loops use the suffix **_number** to distinguish between them. The number of the loop reflects the order in which it appears in the EDI standard.

The following XML shows the syntax of two different types of loop elements with the same loop ID:

```
<LOOP_loop ID_1>
  <segment ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   ...
  </segment ID>
  ...
</LOOP_loop ID_1>
<LOOP_loop ID_2>
  <segment ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   <data element reference ID>...</data element reference ID>
   ...
  </segment ID>
  ...
```

```
</LOOP_loop ID_2>
...
```

Schemas of the Interface File for EDI Messages

The Cloud B2B Gateway contains pre-packaged schemas that define the expected structure of an inbound or outbound interface file for EDI messages. Each message type and version has its own schema.

The schemas are located in the directory `<secure_agent_installation>\main\rdtmDir\DT\ServiceDB`, inside a project folder with the following naming convention:

```
<EDI_standard>_<EDI_version>_<message_type>_<Script object>
```

For EDI X12 messages, the Script object can be either a Parser or a Restricted Serializer (`Restricted_Serializer`). For EDIFACT messages, the Script object can be a Serializer (`Serializer`).

If you trace through the schema of an inbound message, you can determine the relationship between the elements of the schema and the interface file. For an outbound message, use the schema to determine the expected structure of an interface file. Before you create an outbound interface file, study the relevant schema for the message type so that you structure the hierarchy correctly.

Example of an Outbound Interface File for EDI X12 Messages

The outbound interface file for EDI X12 messages contains a root element, message type element, loop elements, segment elements, and data elements.

The following XML represents an interface file for an outbound message of type 810:

```
<x12:interchange xmlns:x12="http://www.informatica.com/B2B/X12/4010">
    <x12:TS_810>
        <ST>
            <R01>810</R01>
            <R02>0007</R02>
        </ST>
        <BIG>
            <R01>20131025</R01>
            <R02>INV159154</R02>
            <R03>20131016</R03>
            <R04>7100124746</R04>
            <R07>FB</R07>
        </BIG>
        <LOOP_IT1>
            <IT1>
                <R01>11</R01>
                <R02>1.000</R02>
                <R03>EA</R03>
                <R04>0.16</R04>
                <R06>VP</R06>
                <R07>HEA006-PHO2S-NL</R07>
            </IT1>
            <TXI>
                <R01>TX</R01>
                <R02>0.00</R02>
                <R06>2</R06>
            </TXI>
            <LOOP_PID>
                <PID>
                    <R01>F</R01>
                    <R05>12" X 15" ABCDEFGHIJ</R05>
                </PID>
            </LOOP_PID>
        </LOOP_IT1>
        <LOOP_IT1>
            <IT1>
                <R01>15</R01>
                <R02>2500.05</R02>
```

```
                <R03>EA</R03>
                <R04>0.25</R04>
                <R06>VP</R06>
                <R07>ABCDEFGHIJ</R07>
            </IT1>
            <TXI>
                <R01>TX</R01>
                <R02>0.00</R02>
                <R06>2</R06>
            </TXI>
            <LOOP_PID>
                <PID>
                    <R01>F</R01>
                    <R05>ABCDEFGHIJ</R05>
                </PID>
            </LOOP_PID>
        </LOOP_IT1>
        <TDS>
            <R01>844969</R01>
        </TDS>
        <TXI>
            <R01>TX</R01>
            <R02>624.11</R02>
            <R06>2</R06>
        </TXI>
        <LOOP_SAC_2>
            <SAC>
                <R01>C</R01>
                <R02>D240</R02>
                <R05>89103</R05>
                <R12>06</R12>
                <R15>Freight</R15>
            </SAC>
        </LOOP_SAC_2>
        <CTT>
            <R01>7</R01>
        </CTT>
        <SE>
            <R01>19</R01>
            <R02>0007</R02>
        </SE>
    </x12:TS_810>
</x12:interchange>
```

The root element for an outbound interface file is specified as `<x12:interchange>` to identify the message as an EDI X12 message. The message type element `<x12:TS_810>` identifies the message as message type 810.

If you trace through the interface file, you can determine the relationship between the elements of the file. The hierarchy contains different IT1 loop elements that contain PID loop elements, and a SAC loop element.

The interface file also contains segment elements with data elements.

Example of an Inbound Interface File for EDI X12 Messages

The inbound interface file for EDI X12 messages contains a root element, message type element, delimiters, loop elements, segment elements, and data elements.

The following XML represents an interface file for an inbound message of type 850:

```
<x12:interchanges xmlns:x12="http://www.informatica.com/B2B/X12/4010">
 <interchange>
  <delimiters>
   <field_separator>*</field_separator>
   <segment_separator>~</segment_separator>
   <composite_separator>^</composite_separator>
   <segment_separator_suffix>
   </segment_separator_suffix>
  </delimiters>
```

```
<ISA>
 <R01>03</R01>
 <R02>Brett     </R02>
 <R03>01</R03>
 <R04>JoZaza    </R04>
 <R05>ZZ</R05>
 <R06>6666           </R06>
 <R07>14</R07>
 <R08>148055531ECPI  </R08>
 <R09>071031</R09>
 <R10>0619</R10>
 <R11>U</R11>
 <R12>00503</R12>
 <R13>111111176</R13>
 <R14>0</R14>
 <R15>P</R15>
 <R16>^</R16>
</ISA>
<GS>
 <R01>PO</R01>
 <R02>4405197800</R02>
 <R03>999999999</R03>
 <R04>20101127</R04>
 <R05>1719</R05>
 <R06>1421</R06>
 <R07>X</R07>
 <R08>004010</R08>
</GS>
<x12:TS_850>
 <ST>
  <R01>850</R01>
  <R02>000000010</R02>
 </ST>
 <BEG>
  <R01>00</R01>
  <R02>SA</R02>
  <R03>08292233294</R03>
  <R05>20101127</R05>
  <R06>610385385</R06>
 </BEG>
 <LOOP_PO1>
  <PO1>
   <R01>1</R01>
   <R02>120</R02>
   <R03>EA</R03>
   <R04>9.25</R04>
   <R05>TE</R05>
   <R06>CB</R06>
   <R07>065322-117</R07>
   <R08>PR</R08>
   <R09>RO</R09>
   <R10>VN</R10>
   <R11>AB3542</R11>
  </PO1>
  <LOOP_PID>
   <PID>
    <R01>F</R01>
    <R05>SMALL WIDGET</R05>
   </PID>
  </LOOP_PID>
  <PO4>
   <R01>4</R01>
   <R02>4</R02>
   <R03>EA</R03>
   <R04>PLT94</R04>
   <R06>3</R06>
   <R07>LR</R07>
   <R08>15</R08>
   <R09>CT</R09>
  </PO4>
 </LOOP_PO1>
```

```
    <LOOP_PO1>
     <PO1>
      <R01>2</R01>
      <R02>220</R02>
      <R03>EA</R03>
      <R04>13.79</R04>
      <R05>TE</R05>
      <R06>CB</R06>
      <R07>066850-116</R07>
      <R08>PR</R08>
      <R09>RO</R09>
      <R10>VN</R10>
      <R11>RD5322</R11>
     </PO1>
    </LOOP_PO1>
    <LOOP_CTT>
     <CTT>
      <R01>6</R01>
     </CTT>
     <AMT>
      <R01>1</R01>
      <R02>13045.94</R02>
     </AMT>
    </LOOP_CTT>
    <SE>
     <R01>14</R01>
     <R02>000000010</R02>
    </SE>
   </x12:TS_850>
   <GE>
    <R01>1</R01>
    <R02>1421</R02>
   </GE>
   <IEA>
    <R01>1</R01>
    <R02>000003438</R02>
   </IEA>
  </interchange>
 </x12:interchanges>
```

If you trace through the hierarchy of the interface file, you can see that there are multiple interchanges. The hierarchy reflects the structure of the relevant message type, the schema, and the type of information that the customer sent.

You can pass the data from this interface file to a backend system for further processing.

Example of an Outbound Interface File for EDIFACT Messages

The outbound interface file for EDIFACT messages contains a root element, message type element, loop elements, segment elements, and data elements.

The root element for an outbound interface file is specified as `<interchange>` to identify the message as an EDIFACT message. In this example, the message type element `<TS_INVOIC>` identifies the message as message type INVOIC.

```
<interchange>
    <TS_INVOIC>
        <UNH>
            <R01>1</R01>
            <R02>
                <R01>INVOIC</R01>
                <R02>D</R02>
                <R03>99A</R03>
                <R04>UN</R04>
                <R05>MMDR01</R05>
            </R02>
            <R03>2002</R03>
            <R04>
```

```
        <R01>1</R01>
    </R04>
</UNH>
<BGM>
    <R01>
        <R01>380</R01>
    </R01>
    <R02>
        <R01>9908001</R01>
    </R02>
    <R03>9</R03>
</BGM>
<DTM>
    <R01>
        <R01>3</R01>
        <R02>19990802</R02>
        <R03>102</R03>
    </R01>
</DTM>
<LOOP_1>
    <RFF>
        <R01>
            <R01>ON</R01>
            <R02>O0010001</R02>
        </R01>
    </RFF>
    <DTM_1>
        <R01>
            <R01>4</R01>
            <R02>19999715</R02>
            <R03>102</R03>
        </R01>
    </DTM_1>
</LOOP_1>
<LOOP_2>
    <NAD>
        <R01>SE</R01>
        <R03>
            <R01>Fahrradhandelpedal</R01>
        </R03>
        <R05>
            <R01>Wagingerstr.5</R01>
        </R05>
        <R06></R06>
        <R07></R07>
        <R08>München</R08>
    </NAD>
</LOOP_2>
<LOOP_2>
    <NAD>
        <R01>BY</R01>
        <R03>
            <R01>HuberGmbH</R01>
        </R03>
        <R05>
            <R01>Obstgasse2</R01>
        </R05>
        <R06>München</R06>
        <R07></R07>
        <R08>81549</R08>
    </NAD>
</LOOP_2>
<LOOP_26>
    <LIN>
        <R01>1</R01>
        <R02></R02>
        <R03>
            <R01>4711,001</R01>
        </R03>
    </LIN>
    <IMD_1>
```

```
            <R01>F</R01>
            <R03>
                <R01></R01>
                <R02></R02>
                <R03></R03>
                <R04>bike,ladies</R04>
            </R03>
        </IMD_1>
        <QTY_2>
            <R01>
                <R01>47</R01>
                <R02>1</R02>
                <R03>PCE</R03>
            </R01>
        </QTY_2>
        <LOOP_27>
            <MOA_6>
                <R01>
                    <R01>66</R01>
                    <R02>750</R02>
                </R01>
            </MOA_6>
        </LOOP_27>
            <LOOP_29>
                <PRI>
                    <R01>
                        <R01>AAA</R01>
                        <R02>750</R02>
                    </R01>
                </PRI>
            </LOOP_29>
    </LOOP_26>
    <LOOP_26>
        <LIN>
            <R01>2</R01>
            <R02></R02>
            <R03>
                <R01>4711,002</R01>
            </R03>
        </LIN>
        <IMD_1>
            <R01>F</R01>
            <R03>
                <R01></R01>
                <R02></R02>
                <R03></R03>
                <R04>airpump,stand</R04>
            </R03>
        </IMD_1>
        <QTY_2>
            <R01>
                <R01>47</R01>
                <R02>1</R02>
                <R03>PCE</R03>
            </R01>
        </QTY_2>
        <LOOP_27>
            <MOA_6>
                <R01>
                    <R01>66</R01>
                    <R02>19.9</R02>
                </R01>
                </MOA_6>
        </LOOP_27>
        <LOOP_29>
            <PRI>
                <R01>
                    <R01>AAA</R01>
                    <R02>19.9</R02>
                </R01>
            </PRI>
```

```
    </LOOP_29>
</LOOP_26>
<LOOP_26>
    <LIN>
        <R01>3</R01>
        <R02></R02>
        <R03>
            <R01>4711,003</R01>
        </R03>
    </LIN>
    <IMD_1>
        <R01>F</R01>
        <R03>
            <R01></R01>
            <R02></R02>
            <R03></R03>
            <R04>replacementvalve</R04>
        </R03>
    </IMD_1>
    <QTY_2>
        <R01>
            <R01>47</R01>
            <R02>3</R02>
            <R03>PCE</R03>
        </R01>
    </QTY_2>
    <LOOP_27>
        <MOA_6>
            <R01>
                <R01>66</R01>
                <R02>7,5</R02>
            </R01>
        </MOA_6>
    </LOOP_27>
    <LOOP_29>
        <PRI>
            <R01>
                <R01>AAA</R01>
                <R02>2.5</R02>
            </R01>
        </PRI>
    </LOOP_29>
</LOOP_26>
<UNS>
    <R01>S</R01>
</UNS>
<CNT>
    <R01>
        <R01>1</R01>
        <R02>180</R02>
    </R01>
</CNT>
<LOOP_50>
    <MOA_12>
        <R01>
            <R01>79</R01>
            <R02>777.4</R02>
        </R01>
    </MOA_12>
</LOOP_50>
<LOOP_50>
    <MOA_12>
        <R01>
            <R01>124</R01>
            <R02>124.38</R02>
        </R01>
    </MOA_12>
</LOOP_50>
<LOOP_50>
    <MOA_12>
        <R01>
```

```
                <R01>128</R01>
                <R02>901.78</R02>
            </R01>
        </MOA_12>
    </LOOP_50>
    <LOOP_52>
        <TAX_4>
            <R01>7</R01>
            <R02>
                <R01>VAT</R01>
            </R02>
            <R04></R04>
            <R05>
                <R01></R01>
                <R02></R02>
                <R03></R03>
                <R04>16</R04>
            </R05>
            <R06>S</R06>
        </TAX_4>
    </LOOP_52>
    <UNT>
        <R01>28</R01>
        <R02>INVOIC0001</R02>
    </UNT>
</TS_INVOIC>
</interchange>
```

Example of an Inbound Interface File for EDIFACT Messages

The inbound interface file for EDIFACT messages contains a root element, message type element, delimiters, loop elements, segment elements, and data elements.

The root element for an inbound interface file is specified as `<interchange>` to identify the message as an EDIFACT message. In this example, the message type element `<TS_ORDERS>` identifies the message as message type ORDERS.

```
<interchange>
    <delimiters>
        <field_separator>+</field_separator>
        <segment_separator>'</segment_separator>
        <composite_separator>:</composite_separator>
        <escape_character>?</escape_character>
    </delimiters>
    <UNA>
        <R01>:</R01>
        <R02>+</R02>
        <R03>.</R03>
        <R04>?</R04>
        <R05> </R05>
        <R06>'</R06>
    </UNA>
    <UNB>
        <R01>
            <R01>UNOC</R01>
            <R02>3</R02>
        </R01>
        <R02>
            <R01>380948745PLA001</R01>
            <R02>ZZZ</R02>
        </R02>
        <R03>
            <R01>0607047800019</R01>
            <R02>14</R02>
        </R03>
        <R04>
            <R01>160525</R01>
            <R02>1606</R02>
```

```
    </R04>
    <R05>50105153010903</R05>
    <R07>ORDERS</R07>
</UNB>
<TS_ORDERS>
    <UNH>
        <R01>1</R01>
        <R02>
            <R01>ORDERS</R01>
            <R02>D</R02>
            <R03>97A</R03>
            <R04>UN</R04>
        </R02>
    </UNH>
    <BGM>
        <R01>
            <R01>105</R01>
        </R01>
        <R02>
            <R01>?+4201138193</R01>
        </R02>
        <R03>9</R03>
    </BGM>
    <DTM>
        <R01>
            <R01>4</R01>
            <R02>20160425</R02>
            <R03>102</R03>
        </R01>
    </DTM>
    <DTM>
        <R01>
            <R01>2</R01>
            <R02>20160509</R02>
            <R03>102</R03>
        </R01>
    </DTM>
    <DTM>
        <R01>
            <R01>137</R01>
            <R02>20160525</R02>
            <R03>102</R03>
        </R01>
    </DTM>
    <LOOP_2>
        <NAD>
            <R01>SU</R01>
            <R02>
                <R01>1110003840</R01>
                <R02></R02>
                <R03>92</R03>
            </R02>
        </NAD>
    </LOOP_2>
    <LOOP_2>
        <NAD>
            <R01>BY</R01>
            <R02>
                <R01>887243</R01>
                <R02></R02>
                <R03>91</R03>
            </R02>
        </NAD>
    </LOOP_2>
    <LOOP_2>
        <NAD>
            <R01>ST</R01>
            <R02>
                <R01>893186</R01>
                <R02></R02>
                <R03>91</R03>
```

```
                </R02>
            </NAD>
        </LOOP_2>
        <LOOP_7>
            <CUX>
                <R01>
                    <R01>2</R01>
                    <R02>PLN</R02>
                    <R03>9</R03>
                </R01>
            </CUX>
        </LOOP_7>
        <LOOP_28>
            <LIN>
                <R01>1001</R01>
                <R02></R02>
                <R03>
                    <R01></R01>
                    <R02>VP</R02>
                </R03>
            </LIN>
            <PIA>
                <R01>5</R01>
                <R02>
                    <R01>?+04705201</R01>
                    <R02>BP</R02>
                </R02>
            </PIA>
            <PIA>
                <R01>5</R01>
                <R02>
                    <R01>1 Handsets</R01>
                    <R02>EN</R02>
                </R02>
            </PIA>
        </LOOP_28>
        <UNS>
            <R01>S</R01>
        </UNS>
        <UNT>
            <R01>13</R01>
            <R02>72</R02>
        </UNT>
    </TS_ORDERS>
    <UNZ>
        <R01>1</R01>
        <R02>50105153010903</R02>
    </UNZ>
</interchange>
```

If you trace through the hierarchy of the interface file, you can see that there are multiple interchanges. The hierarchy reflects the structure of the relevant message type, the schema, and the type of information that the customer sent.

You can pass the data from this interface file to a backend system for further processing.

Data Integration Mappings and Tasks for EDI X12 and EDIFACT Messages

Cloud B2B Gateway uses pre-packaged, EDI processing mappings to handle inbound and outbound EDI X12 and EDIFACT messages based on the flows that you assign to the partner. The EDI processing mappings handle the connectivity between the partner and the Cloud B2B Gateway document store.

When you define an inbound flow you can use custom mappings to process the interface file that the Cloud B2B Gateway EDI processing mapping generates and places on the Cloud B2B Gateway document store to the backend system. You can define a single process-to-backend mapping to process all interface files, a mapping for each type of file that you want to process, or both mapping types. When an inbound process runs, Cloud B2B Gateway first runs the process-to-backend mappings that are defined for specific message types, and then it runs the process-to-backend mapping that is defined for the inbound flow of the partner.

When you define an outbound flow you must define custom backend processing mappings to extract and process the data to send to the partner from the backend system to an interface file on the Cloud B2B Gateway document store. You can define a single process-from-backend mapping to process all the messages to the interface file, a mapping for each type of file that you want to process, or both mapping types. When an outbound process runs, Cloud B2B Gateway first runs the process-from-backend mappings that are defined for specific message types, and then it runs the process-from-backend mapping that is defined for the outbound flow of the partner.. The Cloud B2B Gateway EDI processing mapping reads the messages from the Cloud B2B Gateway document store.

Note: For both inbound and outbound flows, define each message type in one mapping only. If you define the same message type in both a message-specific backend processing mapping and in the flow's backend processing mapping, Cloud B2B Gateway might run messages of that message type twice. For example, if you define a process-from-backend mapping for the *810 Invoice* message type for a customer, and *810 Invoice* is also defined in the process-from-backend mapping that is defined for the outbound flow of the customer, Cloud B2B Gateway might run *810 Invoice* messages twice.

EDI Processing Mappings and Tasks

Cloud B2B Gateway uses pre-packaged, EDI processing mappings and mapping tasks for both inbound and outbound EDI message flows. The tasks are temporary and Cloud B2B Gateway deletes them at the end of the flow.

EDI processing mappings for inbound EDI messages

The source of the mapping is the incoming messages, and the target is an interface file on the Cloud B2B Gateway document store. The task validates the EDI message, sends technical and functional acknowledgment to the partner, converts the EDI messages to an XML interface file, and places the file in the document store.

EDI processing mappings for outbound EDI messages

The source of the mapping is the interface file that you place on the Cloud B2B Gateway document store, and the target is the target location for the partner to which to send the messages. The task enriches the data in the interface file with partner metadata, creates a valid EDI message file, and sends the file to the partner.

Custom Mappings and Tasks for EDI Message Exchange

To send EDI messages to partners, you must create custom mappings for outbound flows. To receive EDI messages from partners, you can optionally create custom mappings for inbound flows. Cloud B2B Gateway

creates a temporary task whenever a custom mapping runs. At the end of the flow, Cloud B2B Gateway deletes the temporary tasks that it created for the flow.

Custom mappings for inbound EDI messages

You can use custom mappings in inbound EDI message flows to process the interface file from the Cloud B2B Gateway document store to the backend system. The source of the mappings is the interface file and the target is the backend system. The mappings use a Hierarchy Parser transformation to convert the XML interface file to relational database format and places the data in the backend system.

If you use custom mappings to process the interface file to the backend system, Cloud B2B Gateway provides end-to-end tracking of inbound messages, from the partner to the backend system. If you use a different method to process the interface file to the backend system, Cloud B2B Gateway tracks the messages from the partner to Cloud B2B Gateway and does not track the messages to the backend system.

Custom mappings for outbound EDI messages

Use custom mappings in outbound EDI message flows to process outgoing messages from the backend system to an interface file on the Cloud B2B Gateway document store. The source of the mappings is the backend system and the target is the Cloud B2B Gateway connection to the location of the interface file. The mappings use a Hierarchy Builder transformation to convert the data to XML format and places the data on the document store.

Rules and Guidelines for Custom EDI Mappings

When you develop custom Data Integration mappings to use in Cloud B2B Gateway for EDI message exchange, consider these rules and guidelines.

- You can create the mappings after your organization is provisioned in Data Integration and Cloud B2B Gateway connections are available for selection when you create the mapping.

  Warning: When you set up the organization in Cloud B2B Gateway, Cloud B2B Gateway creates the connections **B2B EDI Gateway**, **B2B EDI Gateway Endpoint**, and **B2B Gateway Document Store** in the organization in Informatica Intelligent Cloud Services. Do not rename or edit these connections. Editing a connection or changing a connection name might result in errors at run time.
- To use the inbound mapping option, you create process-to-backend mappings. You can define a single process-to-backend mapping to process all interface files, a mapping for each type of file that you want to process, or both mapping types. When an inbound process runs, Cloud B2B Gateway first runs the process-to-backend mappings that are defined for specific message types, and then it runs the process-to-backend mapping that is defined for the inbound flow of the partner. Message types include all the types of messages that you receive from partners. Targets include all the backend applications to which you transfer incoming messages. To handle the Cloud B2B Gateway interface file and to convert it from XML format to relational database format you add Hierarchy Parser transformations to the mappings.
- To convert your relational data to the Cloud B2B Gateway XML interface file in the outbound flow, you must define custom backend processing mappings to extract and process the data to send to the partner from the backend system to an interface file on the Cloud B2B Gateway document store. You can define a single process-from-backend mapping to process all the messages to the interface file, a mapping for each type of file that you want to process, or both mapping types. When an outbound process runs, Cloud B2B Gateway first runs the process-from-backend mappings that are defined for specific message types, and then it runs the process-from-backend mapping that is defined for the outbound flow of the partner. You add Hierarchy Builder transformations to the mappings.

  Note: For both inbound and outbound flows, define each message type in one mapping only. If you define the same message type in both a message-specific backend processing mapping and in the flow's backend processing mapping, Cloud B2B Gateway might run messages of that message type twice. For

example, if you define a process-from-backend mapping for the *810 Invoice* message type for a customer, and *810 Invoice* is also defined in the process-from-backend mapping that is defined for the outbound flow of the customer, Cloud B2B Gateway might run *810 Invoice* messages twice.

- You must parameterize all the connections that you use in the mappings.
- If you assign process-from-backend mappings to specific message types you must also create a message discovery mapping and assign it to the outbound flow of the partner.
- You can use context parameters in custom mappings to add information from the gateway to inbound and outbound messages and to filter the data in inbound and outbound messages. For example, add the partner name to inbound messages, or filter outbound messages based on partner number. Consider the following guidelines when you add the parameters:
  - Add a transformation to the mapping. You can add any transformation that accepts Data Integration parameters as input. For example, an Expression transformation or a Filter transformation.
  - In outbound flows, add the transformation before the target. In inbound flows, add the transformation after the source.
  - Configure ports that add the data. You can configure the following port values:

Data to Add	Port Value
Partner number	PARTNER_NUMBER
Partner name	PARTNER_NAME
Partner Production Interchange ID	PARTNER_PROD_INTERCHANGE_ID
Partner Production Interchange ID	PARTNER_TEST_INTERCHANGE_ID
Event ID	EVENT_ID

  - Port values are not case sensitive.

Creating a process-to-backend mapping for inbound EDI message flows

Create a process-to-backend mapping that processes incoming EDI messages in Data Integration.

A mapping can process a single message type or multiple message types. When you create a partner, you can select a mapping that contains a single message type when you add the message type for the partner. You can select a mapping that includes multiple message types when you define the inbound flow for the partner.

When you create a mapping you select the Cloud B2B Gateway connection as the source, add a filter for each message type in the mapping, add and configure a Hierarchy Parser transformation for each message type, and, for each message type, add the relevant backend systems as targets.

After you add all the required elements to the mapping save and validate the mapping.

Step 1. Create the mapping

Create the mapping for inbound flows.

1. Click **New** > **Mappings**, and then click **Create**.

2. In the mapping Properties panel, enter the mapping name and description, and change the location to save the mapping.

   You can use alphanumeric characters and underscores (_) in the mapping name.

Step 2. Configure the source

Create a Source transformation to specify the Cloud B2B Gateway connection as the source object.

1. Click the Source transformation on the mapping canvas.
2. In the **Properties** panel, on the **General** tab, you can enter a name and description.
3. Click the **Source** tab and then select the following options:

Option	Selection
Connection	B2B EDI Gateway
Source Type	Single Object
Object	GW_EDI_SOURCE

4. Click **New Parameter** to the right of the **Connection** field.

   The **New Input Parameter** dialog box shows.
5. Enter a parameter name and then click **OK**.

   The **New Input Parameter** dialog box closes. In the **Properties** panel, the parameter name you entered shows in the **Connection** field.

   Note: You must parameterize the connection.

Step 3. Create Filter transformations

Create Filter transformations to filter source data based on the message type. Create a transformation for each type of inbound message that you want to map.

1. Add a **Filter** transformation to the mapping canvas and connect the source to the **Filler** transformation.
2. Click the **Filter** tab. In the **Field Name** column select **MESSAGE_TYPE** and then, in the **Value** column, enter the value of the message type for which you create the filter.

Step 4. Create Hierarchy Parser transformations

Create Hierarchy Parser transformations to transform source hierarchical data to relational database data. Create a transformation for each type of inbound message that you want to map.

1. Add a **Hierarchy Parser** transformation to the mapping canvas and connect the **Filler** transformation of the relevant message type to the **Hierarchy Parser** transformation.
2. In the **Properties** panel select the **Input Settings** tab, select the **File** input type, and then click **Select**.

   The **Select Schema** dialog box shows.
3. Select the schema of the message type to add to the inbound flow. For example, if you create a mapping for an EDI X12 810 message, select the `TS_810` level. Click **OK**.
4. Click the **Input Field Selection** tab and map the field **FILE_PATH** from the **Incoming Fields** column to the **Hierarchical Schema Input Fields** column.

5. Click the **Field Mapping** tab. In the **Schema Structure** table expand the **interchanges** element, expand the **interchange** element, and then map fields to the **Relational Fields** area.

   Tip: For details, see the "Hierarchy Parser Transformation" section of the *Data Integration Transformation Guide*.

Step 5. Configure the targets

Create target transformations to specify your backend systems as the target objects. For each message type, create the relevant backend systems as targets.

Note: Do not parameterize the targets.

1. Add a target to the mapping canvas and connect the **Hierarchy Parser** transformation of the relevant message type to the target.

   If you selected multiple fields in the field mapping of the **Hierarchy Parser** transformation, the **Select Output Group** dialog box shows.
2. Select the group or groups to add to the target and then click **OK**.
3. In the **Properties** panel, on the **General** tab, you can enter a name and description.
4. Click the **Target** tab and configure target details.
5. Optionally, click the **Field Mapping** tab and map incoming fields to target fields.

Creating a Process-from-Backend Mapping for Outbound EDI Message Flows

Create a process-from-backend mapping that processes outgoing EDI messages in Data Integration.

A mapping can process a single message type or multiple message types. When you create a partner, you can select a mapping that contains a single message type when you add the message type for the partner. You can select a mapping that includes multiple message types when you define the outbound flow for the partner.

Note: To use mappings that contain a single message type you must also create a message discovery mapping and assign it to the outbound flow of the partner. For more information, see"Creating a Message Discovery Mapping for Outbound EDI Message Flows" on page 58 .

When you create the mapping in Data Integration you select your backend system as the source. You add two source transformations to the mapping, a transformation for the master source and a transformation for the source that contains the message details. For example, add a source that contain the order as the master source and a details source that contains the order details.

If information on multiple message types appears in the same table, you add a filter for each message type. You then add and configure a Hierarchy Builder transformation for each message type, and, for each message type, add the Cloud B2B Gateway interface file as the target.

After you add all the required elements to the mapping save and validate the mapping.

Step 1. Create the Mapping

Create the mapping for outbound flows in Data Integration.

1. Click **New** > **Mappings**, and then click **Create**.
2. In the mapping Properties panel, enter the mapping name and description, and change the location to save the mapping.

   You can use alphanumeric characters and underscores (_) in the mapping name.

Step 2. Configure the source

Create Source transformations to specify your backend system as the source object. Create one source transformation for the master source and one source transformation for the source that contains the message details.

Note: Do not parametetize the sources.

1. Add a source for the master to the mapping canvas.
2. In the **Properties** panel, on the **General** tab, you can enter a name and description.
3. Click the **Source** tab and configure source details.
4. Repeat steps 1 through 3 to add a source transformation for the message details.

Step 3. Create Filter Transformations

If information on multiple message types appears in the same table, create Filter transformations to filter target data based on the message type. Create a transformation for each type of outbound message in the table.

1. Add a **Filter** transformation to the mapping canvas and connect the source to the **Filler** transformation.
2. Click the **Filter** tab. In the **Field Name** column select **MESSAGE_TYPE** and then, in the **Value** column, enter the value of the message type for which you create the filter.
3. Repeat steps 1 through 2 for each message type in the table.

Step 4. Create Hierarchy Builder Transformations

Create Hierarchy Builder transformations to transform source relational database data to XML data. Create a transformation for each type of outbound message that you want to map.

1. Add a **Hierarchy Builder** transformation to the mapping canvas and connect the last transformation that you created for the relevant message type to the **Hierarchy Builder** transformation, that is, the **Source**, **Filler**, or **Expression** transformation that you created for the message type for which you are adding the **Hierarchy Builder** transformation.
2. In the **Properties** panel select the **Output Settings** tab and then click **Select**.

   The **Select Schema** dialog box shows.
3. Select the schema of the message type to add to the outbound flow and then click **OK**.
4. Click the **Field Mapping** tab and, in the **Relational Fields** area, define the relationships between the tables. Assign the following keys to the source tables:
   - For each table, define the primary key.
   - For the table that contains the source details, define a foreign key that points to the master source table.
5. If your schema contains a single master table and a single source details table, the **Hierarchy Builder** transformation creates a file for each master table row. In this case, perform the following tasks to create all table rows into one hierarchy and add the hierarchy to the transformation:
   a. Add a new source table to the transformation, and assign it a primary key.
   b. In the master source table, for every table row, assign a foreign key that points to the primary key of the new source table.

c. Map the new source table from the **Relational Fields** area to the following element in the **Hierarchy Fields** area:

- EDI X12 messages: **interchanges** element.
- EDIFACT messages: **interchange** element.

6. Configure field mappings for the master table:

a. Map the master table from the **Relational Fields** area to the following element in the **Hierarchy Fields** area:

- EDI X12 master table: **Interchange** element.
- EDIFACT master table: **Loop_UNG** element.

Tip: See **PO** in the sample field mappings below.

b. Map the EDI data fields of the table from the **Relational Fields** area to the required EDI segments in the **Hierarchy Fields** area.

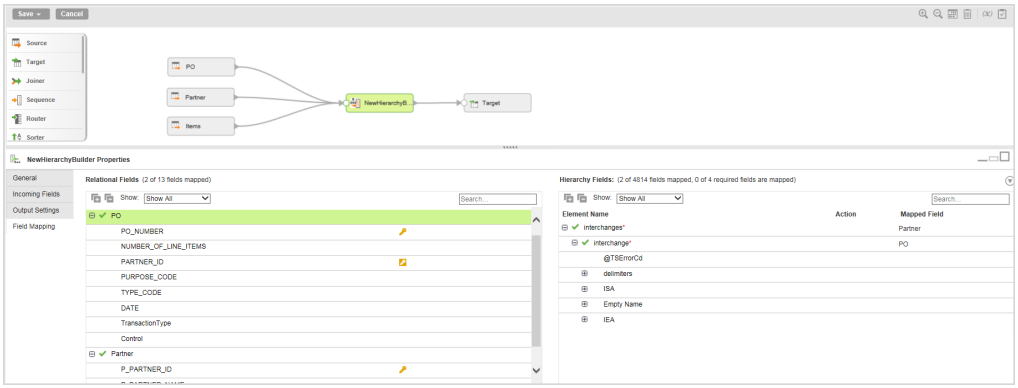
7. Configure field mappings for the details table:

a. Map the table from the **Relational Fields** area to the relevant loop in the **Hierarchy Fields** table.

b. Map the EDI data fields of the table from the **Relational Fields** area to the required EDI segments in the **Hierarchy Fields** area.

Tip: For details, see the "Hierarchy Builder Transformation" section of the *Data Integration Transformation Guide*.

The following image shows sample field mappings for EDI X12 messages:



8. Repeat steps 1 through 7 for each message type.

Step 5. Configure the Target

Create target transformations to specify the Cloud B2B Gateway interface file as the target object. Create a target transformation for each type of message that you want to map.

1. Add a target to the mapping canvas and connect the relevant **Hierarchy Builder** transformation to the target.
2. In the **Properties** panel, on the **General** tab, you can enter a name and description.

3. Click the **Target** tab and then select the following options:

Option	Selection
Target Type	Single Object
Object	GW_TARGET
Operation	Insert

4. Click **New Parameter** to the right of the **Connection** field.

   The **New Input Parameter** dialog box shows.

5. Enter a parameter name and then click **OK**.

   The **New Input Parameter** dialog box closes. In the **Properties** panel, the parameter name you entered shows in the **Connection** field.

   Note: You must parameterize the connection.

6. Click the **Field Mapping** tab. In the **Field mapping options** field, verify that the **Manual** option is selected, and then map the **Output** field in the **Incoming Fields** table to the **DATA** field in the **Target Fields** table.
7. Repeat steps 1 through 6 for each message type.

Creating a Message Discovery Mapping for Outbound EDI Message Flows

Create a message discovery mapping that discovers messages that are ready to be sent to customers, based on the message type. Assign the message discovery mapping to partners to which you assign one or more process-from-backend mappings that contain a single message type.

When you create the mapping you select the Cloud B2B Gateway connection as the source, and the Cloud B2B Gateway XML interface file as the target, and map all the message types that you want the mapping to discover as the target fields.

After you add all the required elements to the mapping save and validate the mapping.

Step 1. Create the Mapping

Create the mapping for outbound flows in Data Integration.

1. Click **New** > **Mappings**, and then click **Create**.
2. In the mapping Properties panel, enter the mapping name and description, and change the location to save the mapping.

   You can use alphanumeric characters and underscores (_) in the mapping name.

Step 2. Configure the source

Create Source transformations to specify your backend system as the source object. Create one source transformation for the master source and one source transformation for the source that contains the message details.

Note: Do not parametetize the sources.

1. Add a source for the master to the mapping canvas.

2. In the **Properties** panel, on the **General** tab, you can enter a name and description.
3. Click the **Source** tab and configure source details.
4. Repeat steps 1 through 3 to add a source transformation for the message details.

Step 3. Configure the Target

Create a target transformation to specify the Cloud B2B Gateway interface file as the target object.

1. Add a target to the mapping canvas and connect the source to the target.
2. In the **Properties** panel, on the **General** tab, you can enter a name and description.
3. Click the **Target** tab and then select the following options:

Option	Selection
Target Type	Single Object
Object	MSG_DISCOVERY
Operation	Insert

4. Click **New Parameter** to the right of the **Connection** field.

   The **New Input Parameter** dialog box shows.
5. Enter a parameter name and then click **OK**.

   The **New Input Parameter** dialog box closes. In the **Properties** panel, the parameter name you entered shows in the **Connection** field.

   Note: You must parameterize the connection.
6. Click the **Field Mapping** tab. In the **Field mapping options** field, verify that the **Manual** option is selected, and then map an **Output** field in the **Incoming Fields** table to the **MSG_TYPE** field in the **Target Fields** table. Map all the **Output** fields to the **Target Fields** table, each **MSG_TYPE** field in a separate row.

Managing Partners for EDI X12 and EDIFACT Messages

Manage partners on the **Explore** page. You can edit and delete partners, and run partner flows manually.

Creating a Partner for EDI and EDIFACT Messages

Create a partner with whom to exchange EDI and EDIFACT messages. A partner can be either a customer or a supplier. When you create a partner, you can define an inbound flow, an outbound flow, or both.

Before you create a partner, confirm the following requirements:

- For an outbound flow, you must create one or more process-from-backend custom mappings before you create the partner. For an inbound flow, if you plan to use process-to-backend custom mappings for the partner, you must create the mappings before you create the partner. You then select the mappings in the new partner wizard.

- If you plan to run a flow by a schedule, verify the schedule has been created or create the schedule in Administrator.
- You must have the appropriate asset privileges to create the partner and define the flow. For more information about privileges, see "User roles" on page 25.

1. Click **New** and select **Partners** > **Customer** or **Partners** > **Supplier**, as applicable.

   The **New Customer** or **New Supplier** wizard appears.

2. In the **General** page enter the partner name and number, select **EDI X12** or **EDIFACT** from the **File Type** list, and then enter the message interchange details. Click **Next**.

   The **Messages** page appears.

3. Perform the following steps:

   a. Click **Add Message** to select a message type to exchange with the partner.

   b. If required, edit the version, mode, or status of the message type.

   c. For each message type, you can assign a custom process to process EDI messages of that type. To assign a custom process to a message type, perform the following tasks:

      1. Customize a Library Data Transformation project in Informatica Developer.
      2. Export or deploy the transformation as a service. For more information, see the *Data Transformation User Guide*.
      3. Upload the custom transformation service to Cloud B2B Gateway. For more information, see "Creating a custom transformation service in Cloud B2B Gateway" on page 28.
      4. In the **Custom Process** field, select a transformation service from the list.

   d. For each message type, you can attach a process-from-backend mapping. To attach a process-from-backend mapping to the message type, click the Actions button to the right of the line of the message type, click **Add Process-from-Backend Mapping**, select a mapping that is appropriate to the message type that you are adding, and then click **Select**.

      Note: For both inbound and outbound flows, define each message type in one mapping only. If you define the same message type in both a message-specific backend processing mapping and in the flow's backend processing mapping, Cloud B2B Gateway might run messages of that message type twice. For example, if you define a process-from-backend mapping for the *810 Invoice* message type for a customer, and *810 Invoice* is also defined in the process-from-backend mapping that is defined for the outbound flow of the customer, Cloud B2B Gateway might run *810 Invoice* messages twice.

   e. Add as many message types as applicable for the partner.

   f. Click **Next**.

   The **Inbound** page appears.

4. To define an inbound flow, perform the following steps:

   a. Select the connection type to use for the flow and then configure connection details.

   b. Select a process-to-backend mapping if applicable. This mapping is used for messages where a process-to-backend mapping is not associated with the message type.

   c. For EDI X12 messages, select whether to use element names or element reference numbers in the Cloud B2B Gateway XML interface files.

   d. Define a schedule for the flow.

   e. Click **Next**.

   The **Outbound** page appears.

5. To define an outbound flow, perform the following steps:
   a. Select the connection type to use for the flow and then configure connection details.
   b. Select one or both of the following mappings:
      - If you assigned process-from-backend mapping to specific messages on the **Messages** page, select a message discovery mapping.
      - Select a process-from-backend mapping to use for messages where a process-from-backend mapping is not associated with the message type.
   c. Define a schedule for the flow.
   d. Click **Save**.

   Tip: If the outbound flow uses the same connection as the inbound flow, click **Copy Details from Inbound** to populate the **Outbound** page with details that you entered in the **Inbound** page and then edit the outbound details, as required.

   The partner you created shows on the **Explore** page.

Editing a Partner

Edit a partner on the **Explore** page.

1. Click **Explore** and navigate to the partner you want to edit.
2. Click the name of the partner that you want to edit, or click the line of the partner that you want to edit and then click the Edit button. The **Edit Customer** or **Edit Supplier** wizard appears, based on the type of partner you are editing.
3. Edit partner settings, as required, and then click **Save**.

Deleting a Partner

Delete a partner on the **Explore** page. When you delete a partner with an event history, the events remain stored in the Cloud B2B Gateway database. You can select to show the partner and the events related to the partner on the event list. Deleted partners show in the event list in view-only mode.

1. Click **Explore**, and navigate to the partner you want to delete.
2. Click the line of the partner that you want to delete. Do not click the partner name. Clicking the partner name opens the **Edit Customer** the or **Edit Supplier** wizard.
3. Click the **Action** icon to the right of the line that you selected and select **Delete**. Then click **Delete** in the confirmation message.

   The partner no longer shows on the **Explore** page. If the partner has associated events, you can view the partner and the events in the event list. For details, see "Event Filters" on page 89.

Running a Partner Flow Manually

Run an inbound or an outbound partner flow from the **Explore** page.

1. Click **Explore**, and then click the line of the partner for which to run the flow. Do not click the partner name. Clicking the partner name opens the **Edit Customer** the or **Edit Supplier** wizard.
2. Click the Actions button to the right of the line that you selected and then select **Run Inbound Flow** or **Run Outbound Flow**, based on the flow to run.

Partner Properties for EDI X12 and EDIFACT Messages

Use the partner wizard to create or edit a partner. A partner can be either a customer or a supplier.

The partner wizard contains the following pages for EDI X12 and EDIFACT messages:

General page

Define basic partner properties.

Messages page

Select the types of messages that you exchange with the partner and define general message details. For each message type that you select you can assign a custom process to process EDI messages of that type, and select process-to-backend and process-from-backend mappings for the message type, as applicable.

Inbound page

Define the connection to use for the inbound flow, select a custom process-to-backend mapping if applicable, and define the schedule by which the flow runs.

Outbound page

Define the connection to use for the outbound flow, select a message discovery mapping, a process-from-backend mapping, or both, and define the schedule by which the flow runs.

Partner General Properties for EDI and EDIFACT Messages

Use the **General** page of the partner wizard to define basic partner properties.

The **General** page includes the following properties for EDI and EDIFACT messages:

Customer or Supplier Name

Name of the partner. The name can contain up to 30 characters and must be unique in the organization and can be used either for a customer or for a supplier, not for both. The name can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Customer or Supplier Number

Number of the partner. The number can contain up to 15 characters and must be unique in the organization. The number can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Tip: Use a number that identifies the partner in your organization.

File Type

Type of files to exchange with the partner. Select **EDI X12** or **EDIFACT**.

Message Interchange Details

Customer or Supplier Interchange Qualifier

Partner interchange qualifier.

Customer or Supplier Interchange Production ID

Interchange identifier that the partner uses in production. The identifier can contain up to 15 ASCII characters for X12 message and up to 30 characters for EDIFACT message.

Customer or Supplier Interchange Test ID

Interchange identifier that the partner uses for testing. The identifier can contain up to 15 ASCII characters for X12 message and up to 30 characters for EDIFACT message.

Note: You must enter at least one partner Interchange ID. Cloud B2B Gateway uses the partner interchange qualifier and identifiers that you provide here in inbound flows, to verify the interchange qualifier and identifier in inbound partner messages. If the qualifier and identifier in inbound partner messages are not identical to those that you provide here, Cloud B2B Gateway rejects the messages.

Organization Interchange Qualifier

Organization interchange qualifier to use in outbound message to your partners. By default, the qualifier that is defined in the organization setup. If you want Cloud B2B Gateway to use a different qualifier in outbound messages for this partner, enter the qualifier here.

Organization Interchange ID

Organization interchange identifier to use in outbound message to your partners. By default, the identifier that is defined in the organization setup. If you want Cloud B2B Gateway to use a different identifier in outbound messages for this partner, enter the identifier here.

Partner Messages Properties for EDI and EDIFACT Messages

Use the **Messages** page of the partner wizard to select the types of messages that you exchange with partners with whom you exchange EDI and EDIFACT messages and to define general message details.

Note: Cloud B2B Gateway rejects incoming messages of a type that is not selected or is disabled for the partner.

The **Messages** page can include the following properties for EDI and EDIFACT messages:

Messages

To select the types of messages that you exchange with the partner, click **Add Message** and then select the message type to add, or select **Add all** to add all supported message types. The list of message types includes the supported X12 or EDIFACT message types, based on the file type you select for the partner in the **General** page.

For each message type, select the version number that you use and select whether to use this type of message in test mode or in production mode. After you select a message type you can disable and enable the use of the message type in exchanges with the partner, as required.

For each message type, you can assign a custom process to process EDI messages of that type. To assign a custom process to a message type, perform the following tasks:

1. Customize a Library Data Transformation project in Informatica Developer.
2. Export or deploy the transformation as a service. For more information, see the *Data Transformation User Guide*.
3. Upload the custom transformation service to Cloud B2B Gateway. For more information, see "Creating a custom transformation service in Cloud B2B Gateway" on page 28.
4. In the **Custom Process** field, select a transformation service from the list.

For each message type, you can attach a process-from-backend mapping. To attach a process-from-backend mapping to the message type, click the Actions button to the right of the line of the message type, click **Add Process-from-Backend Mapping**, select a mapping that is appropriate to the message type that you are adding, and then click **Select**.

Security Information Qualifier

Applicable to the **EDI X12** file type. Select the code to identify the type of information in Security Information. If you select the option **01 Password**, enter the information in the **Security Information** field. Security information can contain up to 10 ASCII characters.

Authorization Information Qualifier

Applicable to the **EDI X12** file type. Select the code to identify the type of information in Authorization Information. If you select an option other than **00 No Authorization Information Present**, enter the information in the **Authorization Information** field. Authorization information can contain up to 10 ASCII characters.

Partner Inbound Properties for EDI and EDIFACT Messages

Use the **Inbound** page of the partner wizard to define the connection to use for the inbound flow and the schedule by which the flow runs, and select custom mappings as applicable.

The **Inbound** page can include the following properties for EDI and EDIFACT messages:

Connection Type

Select the type of the connection from where Cloud B2B Gateway picks up files.

Source Directory

Path to the directory on the connection from where Cloud B2B Gateway picks up files.

File Pattern

Pattern that defines the names of the files that Cloud B2B Gateway picks up. The pattern must be a Java regular expression.

For example:

To pick up all files enter `.*`

To pick up only files that start with `ab` enter `ab\S.*`

Host

Applicable for FTP and SFTP connection types. Host where the files that Cloud B2B Gateway picks up are located.

Port

Applicable for FTP and SFTP connection types. Port where the files that Cloud B2B Gateway picks up are located.

User Name

Applicable for FTP and SFTP connection types. Name of the user to connect to the FTP or SFTP server.

Password

Applicable for FTP and SFTP connection types. Password of the user to connect to the FTP or SFTP server.

Tip: After you configure the connection click **Test Connection** to test and validate the connection.

Delete files on source after pickup

Determines whether or not Cloud B2B Gateway deletes files after pickup. Selected by default.

Processing

- **Process-to-Backend Mapping**. Optionally, select a mapping to process files from Cloud B2B Gateway to the organization backend system. This mapping is used for messages where a process-to-backend mapping is not associated with the message type.
- **XML Interface Files**. Determines whether to use element names or element reference numbers in the Cloud B2B Gateway XML interface files. Applies to EDI X12 messages.

Send Functional Acknowledgment (997)/Send Acknowledgment

Select whether or not to send acknowledgments to the partner. If you select to send acknowledgments, Cloud B2B Gateway generates and sends acknowledgments to the partner upon receiving and processing messages. Selected by default.

Schedule

Schedule by which to run the flow. Select one of the following options:

- Manually or by an external trigger. No schedule. You can run the flow from the **Explore** page or from a REST API. You can also run the flow from the Partner wizard.
- By schedule. Runs the flow according to the defined schedule. Select a schedule from the list.

  Note: To run a flow by a schedule, users need Read and Run permissions for schedules. If permissions are not configured, users cannot see existing schedules. For more information about permissions, see "User roles" on page 25.

Partner Outbound Properties for EDI and EDIFACT Messages

Use the **Outbound** page of the partner wizard to define the connection to use for the outbound flow, select custom mappings as applicable, and define the schedule by which the flow runs.

The **Outbound** page can include the following properties for EDI and EDIFACT messages:

Copy Details from Inbound

Populates the fields in the **Outbound** page with the detailed that you entered in the **Inbound** page. You then edit the fields in the **Outbound** page as required.

Connection Type

Select the type of the connection where Cloud B2B Gateway creates the files for the partner.

Target Directory

Path to the directory on the connection where Cloud B2B Gateway creates the files.

File Pattern

Pattern that defines the names of the files that Cloud B2B Gateway creates. You can use variables with the following file patterns:

- `($eventId)`
- `($partnerName)`
- `($timestamp)`

For example:

```
($eventId).edi
```

The patterns are not case sensitive.

Host

Applicable for FTP and SFTP connection types. Host where Cloud B2B Gateway creates the files.

Port

Applicable for FTP and SFTP connection types. Port where Cloud B2B Gateway creates the files.

User Name

Applicable for FTP and SFTP connection types. Name of the user to connect to the FTP or SFTP server.

Password

Applicable for FTP and SFTP connection types. Password of the user to connect to the FTP or SFTP server.

Tip: After you configure the connection click **Test Connection** to test and validate the connection.

Processing

Select one or both of the following mappings:

- If you assigned process-from-backend mapping to specific messages on the **Messages** page, select a message discovery mapping.
- Select a process-from-backend mapping to use for messages where a process-from-backend mapping is not associated with the message type.

Message Details

Select the following message details or accept the default values:

- Data Element Separator. Symbol used in the file as a data element separator.
- Repetition Separator. Symbol used in the file as a repetition separator.
- Component Element Separator. Symbol used in the file as a component element separator.
- Segment Terminator. Symbol used in the file as a segment terminator. Select **Add new line** to start a new line at the end of the segment.
- Decimal mark. Applicable to the **EDIFACT** file type. Symbol used in the file as a decimal mark.
- Release Character. Applicable to the **EDIFACT** file type. Symbol used in the file as a release character.
- Request technical acknowledgment (TA1). Applicable to the **EDI X12** file type. Determines whether or not you receive a technical acknowledgment for the file you send. Selected by default.
- Request functional acknowledgment (997). Applicable to the **EDI X12** file type. Determines whether or not you receive a functional acknowledgment for a functional group in the file you send. Selected by default.
- Add UNG group header. Applicable to the **EDIFACT** file type. Determines whether or not message type events show the functional groups that are sent in the file. By default, not selected.
- Request acknowledgment. Applicable to the **EDIFACT** file type. Determines whether or not you receive an acknowledgment when you send the file. Selected by default.

Note: Separators and terminators must be unique. You cannot assign the same symbol to more than one separator or terminator.

Schedule

Schedule by which to run the flow. Select one of the following options:

- Manually or by an external trigger. No schedule. You can run the flow from the **Explore** page or from a REST API. You can also run the flow from the Partner wizard.

- By schedule. Runs the flow according to the defined schedule. Select a schedule from the list.

  Note: To run a flow by a schedule, users need Read and Run permissions for schedules. If permissions are not configured, users cannot see existing schedules. For more information about permissions, see “User roles” on page 25.

CHAPTER 4

Custom Files with Custom Mappings

This chapter includes the following topics:

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- Interface Files for Custom Files, 69
- Data Integration Mappings and Tasks for Custom Files with Custom Mappings, 69
- Managing Partners for Custom Files with Custom Mappings, 71
- Partner Properties for Custom Files with Custom Mappings, 72

Custom Files with Custom Mappings Overview

Cloud B2B Gateway uses custom Data Integration mappings, which you create, to validate and handle custom file exchanges between the organization and its partners.

Custom mappings for inbound custom files

Use an inbound mapping to receive files from partners. If you use the two-step processing method, the inbound mapping writes the files to an interface file on the Cloud B2B Gateway document store. If you use the single-step method, the inbound mapping writes the data to the backend system. The source of the inbound mapping is the incoming files, and the target is either an interface file on the Cloud B2B Gateway document store or the backend system, based on the method that you use.

If the target of the mapping is Cloud B2B Gateway, you can use a process-to-backend mapping to read the files from the gateway and write the data to the backend system. The source of the process-to-backend mapping is the interface file on Cloud B2B Gateway, and the target is the backend system.

For inbound Excel, TXT, and CSV files, instead of creating custom mappings to process the incoming files, you can use Informatica Intelligent Structure Discovery to automatically discover the file structure and create CSV interface files. You can then create custom mappings that process the data to your backend system.

Custom mappings for outbound custom files

Use a process-from-backend mapping to read outgoing data from the backend system. If you use the two-step processing method, the process-from-backend mapping writes the data to an interface file on the Cloud B2B Gateway document store. If you use the single-step method, the process-from-backend mapping sends the files to the partner. The target of the mapping is either an interface file on the Cloud B2B Gateway document store or the partner, based on the method that you use.

If the target of the mapping is Cloud B2B Gateway, you can use an outbound mapping to read the files from the gateway and send them to the partner. The source of the outbound mapping is the interface file on Cloud B2B Gateway, and the target is the target location for the partner to which to send the files.

Interface Files for Custom Files

When you exchange custom files with your partners, you can use any type of file as the interface file for custom mappings.

Data Integration Mappings and Tasks for Custom Files with Custom Mappings

Cloud B2B Gateway uses custom mappings to handle inbound and outbound custom files based on the flows that you assign to the partner.

When you define an inbound flow you must use a custom mapping to receive partner files. The inbound mapping can write the data either to an interface file on the Cloud B2B Gateway document store or to the backend system. If the inbound mapping writes the data to the document store, you can use an additional custom mapping to write the data to the backend system.

For inbound Excel, TXT, and CSV files, instead of creating custom mappings to process the incoming files, you can use Informatica Intelligent Structure Discovery to automatically discover the file structure and create CSV interface files. You can then create custom mappings that process the data to your backend system.

When you define an outbound flow you must use a custom mapping to read the data to send to the partner from the backend system. The mapping can either write the data to an interface file on the Cloud B2B Gateway document store or send the files to the partner. If the mapping writes the data to the document store, you can use an additional, outbound custom mapping to send the files to the partner.

Rules and Guidelines for Custom File Mappings

When you develop custom Data Integration mappings to use in Cloud B2B Gateway for custom, non-EDI file exchange, consider these rules and guidelines.

General rules and guidelines

- The mappings can process any type of file. Cloud B2B Gateway does not verify the file type when it runs the mapping.
- You can create the mappings after your organization is provisioned in Data Integration and Cloud B2B Gateway connections are available for selection when you create the mapping.

  Warning: When you set up the organization in Cloud B2B Gateway, Cloud B2B Gateway creates the connections **B2B EDI Gateway**, **B2B EDI Gateway Endpoint**, and **B2B Gateway Document Store** in the organization in Informatica Intelligent Cloud Services. Do not rename or edit these connections. Editing a connection or changing a connection name might result in errors at run time.
- You must parameterize all the connections that you use in the mappings.

- You can use context parameters in custom mappings to add information from the gateway to inbound and outbound messages and to filter the data in inbound and outbound messages. For example, add the partner name to inbound messages, or filter outbound messages based on partner number. Consider the following guidelines when you add the parameters:
  - Add a transformation to the mapping. You can add any transformation that accepts Data Integration parameters as input. For example, an Expression transformation or a Filter transformation.
  - In outbound flows, add the transformation before the target. In inbound flows, add the transformation after the source.
  - Configure ports that add the data. You can configure the following port values: `PARTNER_NUMBER` and `PARTNER_NAME`.
  - Port values are not case sensitive.
- When the target of a mapping is GW_ROUTER, the value that you assign to the STATUS_MESSAGE port appears in Error events. For all other event statuses, the gateway does not show the status message in the event. Therefore, assign a value to STATUS_MESSAGE only in case IS_EROOR is true.

Rules and guidelines for inbound flows

Consider the following guidelines when you define the mapping:

Mappings Used in the Flow	Mapping	Source Connection	Source Object	Target Connection	Target Object
Inbound mapping	Inbound	B2B EDI Gateway Endpoint	get	Any	Any
Both inbound and process-to-backend mappings	Inbound	B2B EDI Gateway Endpoint	get	B2B EDI Gateway	CUSTOM_TARGET
	Process-to-backend	B2B EDI Gateway	CUSTOM_SOURCE	Any	Any

Rules and guidelines for outbound flows

Consider the following guidelines when you define the mapping:

Mappings Used in the Flow	Mapping	Source Connection	Source Object	Target Connection	Target Object
Process-from-backend	Process-from-backend	Any	Any	B2B EDI Gateway Endpoint and B2B EDI Gateway	put and CUSTOM_TARGET
Both process-from-backend and outbound mappings	Process-from-backend	Any	Any	B2B EDI Gateway	CUSTOM_TARGET
	Outbound	B2B EDI Gateway	CUSTOM_SOURCE	B2B EDI Gateway Endpoint and B2B EDI Gateway	put and CUSTOM_TARGET

Managing Partners for Custom Files with Custom Mappings

Manage partners on the **Explore** page. You can edit and delete partners, and run partner flows manually.

Creating a Partner for Custom Files with Custom Mappings

You can create a partner with whom to exchange custom files. A partner can be either a customer or a supplier. When you create a partner, you can define an inbound flow, an outbound flow, or both.

Before you create the partner, you must create the following custom mappings, based on the flows that you define for the partner:

- For an inbound flow, you must create the inbound mapping. If you plan to use a process-to-backend mapping for the flow, you must also create the process-to-backend mapping.
- For an outbound flow, you must create a process-from-backend mapping. If you plan to use an outbound mapping for the flow, you must also create the outbound mapping.

You then select the mappings in the new partner wizard, as applicable.

If you plan to run a flow by a schedule, verify the schedule has been created or create the schedule in Administrator.

You must have the appropriate asset privileges to create the partner and define the flow. For more information about privileges, see "User roles" on page 25.

1. Click **New** and select **Partners** > **Customer** or **Partners** > **Supplier**, as applicable.

   The **New Customer** or **New Supplier** wizard appears.

2. In the **General** page enter the partner name and number and then, from the **File Type** list, select **Custom**. Clear the option **Use intelligent structure discovery** and then click **Next**.

   The **Inbound** page appears.

3. To define an inbound flow, select the connection type to use for the flow and then configure connection details. Select the inbound mapping, select a process-to-backend mapping if applicable, define a schedule for the flow, and then click **Next**.

   The **Outbound** page appears.

4. To define an outbound flow, select the connection type to use for the flow and then configure connection details. Select the process-from-backend mapping and, if applicable, the outbound mappings, define a schedule for the flow, and then click **Save**.

   Tip: If the outbound flow uses the same connection as the inbound flow, click **Copy Details from Inbound** to populate the **Outbound** page with details that you entered in the **Inbound** page and then edit the outbound details, as required.

   The partner you created shows on the **Explore** page.

Editing a Partner

Edit a partner on the **Explore** page.

1. Click **Explore** and navigate to the partner you want to edit.

2. Click the name of the partner that you want to edit, or click the line of the partner that you want to edit and then click the Edit button. The **Edit Customer** or **Edit Supplier** wizard appears, based on the type of partner you are editing.
3. Edit partner settings, as required, and then click **Save**.

Deleting a Partner

Delete a partner on the **Explore** page. When you delete a partner with an event history, the events remain stored in the Cloud B2B Gateway database. You can select to show the partner and the events related to the partner on the event list. Deleted partners show in the event list in view-only mode.

1. Click **Explore**, and navigate to the partner you want to delete.
2. Click the line of the partner that you want to delete. Do not click the partner name. Clicking the partner name opens the **Edit Customer** the or **Edit Supplier** wizard.
3. Click the **Action** icon to the right of the line that you selected and select **Delete**. Then click **Delete** in the confirmation message.

   The partner no longer shows on the **Explore** page. If the partner has associated events, you can view the partner and the events in the event list. For details, see "Event Filters" on page 89.

Running a Partner Flow Manually

Run an inbound or an outbound partner flow from the **Explore** page.

1. Click **Explore**, and then click the line of the partner for which to run the flow. Do not click the partner name. Clicking the partner name opens the **Edit Customer** the or **Edit Supplier** wizard.
2. Click the Actions button to the right of the line that you selected and then select **Run Inbound Flow** or **Run Outbound Flow**, based on the flow to run.

Partner Properties for Custom Files with Custom Mappings

Use the partner wizard to create or edit a partner. A partner can be either a customer or a supplier.

The partner wizard contains the following pages for custom files with custom mappings:

General page

Define basic partner properties.

Inbound page

Define the connection to use for the inbound flow, select an inbound mapping, select a process-to-backend mapping if applicable, and define the schedule by which the flow runs.

Outbound page

Define the connection to use for the outbound flow, select a process-from-backend mapping, select an outbound mapping if applicable, and define the schedule by which the flow runs.

Partner General Properties for Custom Files with Custom Mappings

Use the **General** page of the partner wizard to define basic partner properties.

The **General** page includes the following properties for custom files with custom mappings:

Customer or Supplier Name

Name of the partner. The name can contain up to 30 characters and must be unique in the organization and can be used either for a customer or for a supplier, not for both. The name can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Customer or Supplier Number

Number of the partner. The number can contain up to 15 characters and must be unique in the organization. The number can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Tip: Use a number that identifies the partner in your organization.

File Type

Type of files to exchange with the partner. Select **Custom**.

Use intelligent structure discovery

Clear this option.

Partner Inbound Properties for Custom Files with Custom Mappings

Use the **Inbound** page of the partner wizard to define the connection to use for the inbound flow and the schedule by which the flow runs, and select custom mappings as applicable.

The **Inbound** page can include the following properties for custom files with custom mappings:

Connection Type

Select the type of the connection from where Cloud B2B Gateway picks up files.

Source Directory

Path to the directory on the connection from where Cloud B2B Gateway picks up files.

File Pattern

Pattern that defines the names of the files that Cloud B2B Gateway picks up. The pattern must be a Java regular expression.

For example:

To pick up all files enter `.*`

To pick up only files that start with `ab` enter `ab\S.*`

Host

Applicable for FTP and SFTP connection types. Host where the files that Cloud B2B Gateway picks up are located.

Port

Applicable for FTP and SFTP connection types. Port where the files that Cloud B2B Gateway picks up are located.

User Name

Applicable for FTP and SFTP connection types. Name of the user to connect to the FTP or SFTP server.

Password

Applicable for FTP and SFTP connection types. Password of the user to connect to the FTP or SFTP server.

Tip: After you configure the connection click **Test Connection** to test and validate the connection.

Delete files on source after pickup

Determines whether or not Cloud B2B Gateway deletes files after pickup. Selected by default.

Mapping

Select an inbound mapping to receive files from the customer. If the target of the mapping is an interface file on the Cloud B2B Gateway document store, you can select a process-to-backend mapping to read the files from the gateway and write the data to the backend system.

Schedule

Schedule by which to run the flow. Select one of the following options:

- Manually or by an external trigger. No schedule. You can run the flow from the **Explore** page or from a REST API. You can also run the flow from the Partner wizard.
- By schedule. Runs the flow according to the defined schedule. Select a schedule from the list.

  Note: To run a flow by a schedule, users need Read and Run permissions for schedules. If permissions are not configured, users cannot see existing schedules. For more information about permissions, see "User roles" on page 25.

Partner Outbound Properties for Custom Files with Custom Mappings

Use the **Outbound** page of the partner wizard to define the connection to use for the outbound flow, select custom mappings as applicable, and define the schedule by which the flow runs.

The **Outbound** page can include the following properties for custom files with custom mappings:

Copy Details from Inbound

Populates the fields in the **Outbound** page with the detailed that you entered in the **Inbound** page. You then edit the fields in the **Outbound** page as required.

Connection Type

Select the type of the connection where Cloud B2B Gateway creates the files for the partner.

Target Directory

Path to the directory on the connection where Cloud B2B Gateway creates the files.

File Pattern

Pattern that defines the names of the files that Cloud B2B Gateway creates. You can use variables with the following file patterns:

- `($eventId)`
- `($partnerName)`
- `($timestamp)`

For example:

```
($eventId).edi
```

The patterns are not case sensitive.

Host

Applicable for FTP and SFTP connection types. Host where Cloud B2B Gateway creates the files.

Port

Applicable for FTP and SFTP connection types. Port where Cloud B2B Gateway creates the files.

User Name

Applicable for FTP and SFTP connection types. Name of the user to connect to the FTP or SFTP server.

Password

Applicable for FTP and SFTP connection types. Password of the user to connect to the FTP or SFTP server.

Tip: After you configure the connection click **Test Connection** to test and validate the connection.

Mapping

Select a process-from-backend mapping to read outgoing data from the backend system. If the target of the mapping is an interface file on the Cloud B2B Gateway document store, you can select an outbound mapping to read the files from the gateway and send the files to the partner.

Schedule

Schedule by which to run the flow. Select one of the following options:

- Manually or by an external trigger. No schedule. You can run the flow from the **Explore** page or from a REST API. You can also run the flow from the Partner wizard.
- By schedule. Runs the flow according to the defined schedule. Select a schedule from the list.

  Note: To run a flow by a schedule, users need Read and Run permissions for schedules. If permissions are not configured, users cannot see existing schedules. For more information about permissions, see "User roles" on page 25.

CHAPTER 5

Inbound Custom Files with Intelligent Structure Discovery

This chapter includes the following topics:

- Inbound Custom Files with Intelligent Structure Discovery Overview, 76
- Interface Files for Custom Files with Intelligent Structure Discovery, 77
- Intelligent Structure Discovery Message Structures, 77
- Data Integration Mappings and Tasks for Custom Files with Intelligent Structure Discovery, 77
- Managing Partners for Custom Files with Intelligent Structure Discovery, 80
- Partner Properties for Custom Files with Intelligent Structure Discovery, 81

Inbound Custom Files with Intelligent Structure Discovery Overview

You can use Intelligent Structure Discovery to receive incoming Excel, TXT, and CSV files from customers. Intelligent Structure Discovery writes the files to an interface file on the Cloud B2B Gateway document store.

In addition, use custom Data Integration mappings, which you create, to handle the following stages of the file exchanges between the organization and its partners:

Custom mappings for inbound custom files with Intelligent Structure Discovery

You can use a process-to-backend mapping to read the files from the document store and write the data to the backend system. The source of the process-to-backend mapping is the interface file on Cloud B2B Gateway, and the target is the backend system.

Custom mappings for outbound custom files

Use a process-from-backend mapping to read outgoing data from the backend system. If you use the two-step processing method, the process-from-backend mapping writes the data to an interface file on the Cloud B2B Gateway document store. If you use the single-step method, the process-from-backend mapping sends the files to the partner. The target of the mapping is either an interface file on the Cloud B2B Gateway document store or the partner, based on the method that you use.

If the target of the mapping is Cloud B2B Gateway, you can use an outbound mapping to read the files from the gateway and send them to the partner. The source of the outbound mapping is the interface file on Cloud B2B Gateway, and the target is the target location for the partner to which to send the files.

Interface Files for Custom Files with Intelligent Structure Discovery

For inbound CSV, TXT, and Excel files that use Intelligent Structure Discovery, Intelligent Structure Discovery creates CSV interface files between the custom mappings and the file structures.

Intelligent Structure Discovery Message Structures

EDI and EDIFACT files contain information that is structured according to the EDI or EDIFACT standard. Non-EDI files, such as Excel files, contain information that is structured according to the needs of the user. For example, an Excel file might contain tables with inventory information. The structure of the information gives meaning to the inventory data that is presented in the columns and rows.

Intelligent Structure Discovery uses artificial intelligence and machine learning algorithms to automate structure discovery for such files by evaluating the type of data that is presented. When Intelligent Structure Discovery runs, it creates and displays a message structure that contains the elements that were identified in the discovery process.

For more information about managing intelligent structures, see *Intelligent structures* in the Data Integration service help.

Creating a Structure

Create a message structure for Cloud B2B Gateway in Data Integration.

1. In Data Integration, click **New** > **Components** > **Intelligent Structure Model**.

   The New Structure wizard appears.
2. In the **General** page, enter a name and description. You must provide a name for the message structure.
3. To create a message structure, browse for a file and click **Discover Structure**.
4. To refine the message structure, you can select an element and combine, exclude, flatten, or collapse the element.
5. To save the message structure, click **Save**.

Data Integration Mappings and Tasks for Custom Files with Intelligent Structure Discovery

When you use Intelligent Structure Discovery to receive incoming Excel, TXT, and CSV files from customers, Intelligent Structure Discovery writes the files to interface files on the Cloud B2B Gateway document store. You can use a process-to-backend Data Integration custom mapping to read the interface files from the document store and write the data to the backend system.

When you define an outbound flow you must use a custom mapping to read the data to send to the partner from the backend system. The mapping can either write the data to an interface file on the Cloud B2B Gateway document store or send the files to the partner. If the mapping writes the data to the document

store, you can use an additional, outbound custom mapping to send the files to the partner. For more information, see "Rules and Guidelines for Custom File Mappings" on page 69.

Creating a Custom Mapping for Inbound Custom Files with Intelligent Structure Discovery

Create a mapping that processes all incoming files for a message structure from the Cloud B2B Gateway document store to the backend system.

You can create as many mappings as required, one mapping for each message structure for which you want to process the interface files to the backend system.

When you create the mapping you select the Cloud B2B Gateway document store as the source, select the fields that you want to use in the mapping, and define the sample interface files of the structure as source parameters. You configure the organization backend system as the mapping target and map fields. You can add other elements to the mapping, based on your business logic, for example, filters and joiners.

After you add all the required elements to the mapping save and validate the mapping.

Step 1. Create the mapping

Create the mapping for inbound flows.

1. Click **New** > **Mappings**, and then click **Create**.
2. In the mapping Properties panel, enter the mapping name and description, and change the location to save the mapping.

   You can use alphanumeric characters and underscores (_) in the mapping name.

Step 2. Configure the Sources

Create source transformations to specify the sample interface files on the Cloud B2B Gateway connection as the source objects.

1. Add a source to the mapping canvas.
2. Click the **Source** tab and then select the following options:

Option	Selection
Connection	Flat file connection that accesses the interface files.
Source Type	Single Object
Object	A sample interface file.

3. Repeat steps 1 and 2 for all the sample interface files.

Step 3. Select Incoming Fields

For each sample interface file, select the incoming fields to use in the mapping.

1. Add an object to the mapping canvas and connect one of the source transformations you created to the object you add. You can add any type of object, based on the business logic that you want to add to the mapping. For example, a filter or a joiner. The object can also be the target of the mapping.

2. Select the object you added. Select the **Incoming Fields** tab and, in the **Field Rules** table, select the following options:

Option	Selection
Operator	Include
Field Selection Criteria	Named Fields

   Click anywhere outside of the **Field Selection Criteria** selection box.

3. In the **Field Rules** table, under **Details**, click **Configure**.

   The **Include Named Fields** dialog box appears, listing all the fields in the sample interface file.

4. Select the incoming fields to use in the mapping and then click **OK**.

   The **Include Named Fields** dialog box closes.

5. If required, add more elements to the mappings to build the business logic of the mapping.

   Note: If you selected incoming fields in a target transformation, do not add elements after the target. The target must be the last element in the mapping.

6. Repeat steps 1 through 5 for all the sample interface files that you defined as sources in the mapping.

Step 4. Configure the Targets

Create target transformations to specify your backend systems as the target objects for the interface files. Each sample interface file that you defined as a source in the mapping must be mapped to a target.

Note: If you added target transformations when you selected incoming fields, you do not need to add more target transformations.

1. Add a target to the mapping canvas and connect the last element on the mapping to the target, or, if you already added a target to the mapping, select the existing target.
2. Click the **Target** tab and configure target details.
3. Click the **Field Mapping** tab and map incoming fields to target fields.

Step 5. Parameterize the Sources

Parameterize the sources. Name each source parameter by the name of the sample interface file that is the source object.

1. Click the **Source** tab, select a source element, and then select the following options:

Option	Selection
Connection	B2B Gateway Document Store
Source Type	Parameter

2. Click **New Parameter**.

   The **New Input Parameter** dialog box appears.

3. In the **Name** field, enter the name of an output group in the structure. Click **OK**.
4. Repeat steps 1 through 3 for all the sources in the mapping.

Managing Partners for Custom Files with Intelligent Structure Discovery

Manage partners on the **Explore** page. You can edit and delete partners, and run partner flows manually.

Creating a Partner for Custom Files with Intelligent Structure Discovery

Create a partner with whom to exchange custom files with Intelligent Structure Discovery. A partner can be either a customer or a supplier. When you create a partner, you can define an inbound flow, an outbound flow, or both.

Before you create the partner, you must create the following structures and custom mappings, based on the flows that you define for the partner:

- For an inbound flow, you must create the structures of the files that you plan to exchange with the partner. For information about creating structures, see "Creating a Structure" on page 77.
  If you plan to use a process-to-backend mapping for the flow, you must also create the process-to-backend mapping.
- For an outbound flow, you must create a process-from-backend mapping. If you plan to use an outbound mapping for the flow, you must also create the outbound mapping.

You then select the structures and the mappings in the new partner wizard, as applicable.

If you plan to run a flow by a schedule, verify the schedule has been created or create the schedule in Administrator.

You must have the appropriate asset privileges to create the partner and define the flow. For more information about privileges, see "User roles" on page 25.

1. Click **New** and select **Partners** > **Customer** or **Partners** > **Supplier**, as applicable.

   The **New Customer** or **New Supplier** wizard appears.
2. In the **General** page enter the partner name and number and then, from the **File Type** list, select **Custom**, and then click **Next**.

   The **Messages** page appears.
3. Click **Select Structure** and choose a message structure. Click **Select**, and then click **Next**.

   The **Inbound** page appears.
4. To define an inbound flow, configure the connection to use for the flow, select a process-to-backend mapping if applicable, define a schedule for the flow, and then click **Next**.

   The **Outbound** page appears.
5. To define an outbound flow, select the connection type to use for the flow and then configure connection details. Select the process-from-backend mapping and, if applicable, the outbound mappings, define a schedule for the flow, and then click **Save**.

   Tip: If the outbound flow uses the same connection as the inbound flow, click **Copy Details from Inbound** to populate the **Outbound** page with details that you entered in the **Inbound** page and then edit the outbound details, as required.

   The partner you created shows on the **Explore** page.

Editing a Partner

Edit a partner on the **Explore** page.

1. Click **Explore** and navigate to the partner you want to edit.
2. Click the name of the partner that you want to edit, or click the line of the partner that you want to edit and then click the Edit button. The **Edit Customer** or **Edit Supplier** wizard appears, based on the type of partner you are editing.
3. Edit partner settings, as required, and then click **Save**.

Deleting a Partner

Delete a partner on the **Explore** page. When you delete a partner with an event history, the events remain stored in the Cloud B2B Gateway database. You can select to show the partner and the events related to the partner on the event list. Deleted partners show in the event list in view-only mode.

1. Click **Explore**, and navigate to the partner you want to delete.
2. Click the line of the partner that you want to delete. Do not click the partner name. Clicking the partner name opens the **Edit Customer** the or **Edit Supplier** wizard.
3. Click the **Action** icon to the right of the line that you selected and select **Delete**. Then click **Delete** in the confirmation message.

   The partner no longer shows on the **Explore** page. If the partner has associated events, you can view the partner and the events in the event list. For details, see "Event Filters" on page 89.

Running a Partner Flow Manually

Run an inbound or an outbound partner flow from the **Explore** page.

1. Click **Explore**, and then click the line of the partner for which to run the flow. Do not click the partner name. Clicking the partner name opens the **Edit Customer** the or **Edit Supplier** wizard.
2. Click the Actions button to the right of the line that you selected and then select **Run Inbound Flow** or **Run Outbound Flow**, based on the flow to run.

Partner Properties for Custom Files with Intelligent Structure Discovery

Use the partner wizard to create or edit a partner. A partner can be either a customer or a supplier.

The partner wizard contains the following pages for custom files with Intelligent Structure Discovery:

General page

Define basic partner properties.

Messages page

Add intelligent structures to process partner messages.

Inbound page

Define the connection to use for the inbound flow, select a process-to-backend mapping if applicable, and define the schedule by which the flow runs.

Outbound page

Define the connection to use for the outbound flow, select a process-from-backend mapping, select an outbound mapping if applicable, and define the schedule by which the flow runs.

Partner General Properties for Custom Files with Intelligent Structure Discovery

Use the **General** page of the partner wizard to define basic partner properties.

The **General** page includes the following properties for custom files with Intelligent Structure Discovery:

Customer or Supplier Name

Name of the partner. The name can contain up to 30 characters and must be unique in the organization and can be used either for a customer or for a supplier, not for both. The name can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Customer or Supplier Number

Number of the partner. The number can contain up to 15 characters and must be unique in the organization. The number can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Tip: Use a number that identifies the partner in your organization.

File Type

Type of files to exchange with the partner. Select **Custom**.

Use intelligent structure discovery

Must be enabled.

Partner Messages Properties for Custom Files with Intelligent Structure Discovery

Use the **Messages** page of the partner wizard to select a message structure for a sample custom input file. You can only select one

The **Messages** page shows the list of selected message structures, and includes the following properties:
Names

Name of the message structure. The name can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Description

Description of the message structure. The description can contain alphanumeric characters, symbols, and special characters, and must not contain angled brackets (< or >).

Select Structure

Click **Select Structure**, select a structure in the **Select Structure** page, and then click **Select**.

Partner Inbound Properties for Custom Files with Intelligent Structure Discovery

Use the **Inbound** page of the partner wizard to define the connection to use for the inbound flow and the schedule by which the flow runs, and select custom mappings as applicable.

The **Inbound** page can include the following properties for custom files with Intelligent Structure Discovery:

Connection Type

Select the type of the connection from where Cloud B2B Gateway picks up files.

Source Directory

Path to the directory on the connection from where Cloud B2B Gateway picks up files.

File Pattern

Pattern that defines the names of the files that Cloud B2B Gateway picks up. The pattern must be a Java regular expression.

For example:

To pick up all files enter `.*`

To pick up only files that start with `ab` enter `ab\S.*`

Host

Applicable for FTP and SFTP connection types. Host where the files that Cloud B2B Gateway picks up are located.

Port

Applicable for FTP and SFTP connection types. Port where the files that Cloud B2B Gateway picks up are located.

User Name

Applicable for FTP and SFTP connection types. Name of the user to connect to the FTP or SFTP server.

Password

Applicable for FTP and SFTP connection types. Password of the user to connect to the FTP or SFTP server.

Tip: After you configure the connection click **Test Connection** to test and validate the connection.

Delete files on source after pickup

Determines whether or not Cloud B2B Gateway deletes files after pickup. Selected by default.

Processing

- **Process-to-Backend Mapping**. Optionally, select a mapping to process files from Cloud B2B Gateway to the organization backend system. This mapping is used for messages where a process-to-backend mapping is not associated with the message type.
- **XML Interface Files**. Determines whether to use element names or element reference numbers in the Cloud B2B Gateway XML interface files. Applies to EDI X12 messages.

Schedule

Schedule by which to run the flow. Select one of the following options:

- Manually or by an external trigger. No schedule. You can run the flow from the **Explore** page or from a REST API. You can also run the flow from the Partner wizard.

- By schedule. Runs the flow according to the defined schedule. Select a schedule from the list.

  Note: To run a flow by a schedule, users need Read and Run permissions for schedules. If permissions are not configured, users cannot see existing schedules. For more information about permissions, see "User roles" on page 25.

Partner Outbound Properties for Custom Files with Intelligent Structure Discovery

Use the **Outbound** page of the partner wizard to define the connection to use for the outbound flow, select a custom mapping if applicable, and define the schedule by which the flow runs.

The **Outbound** page can include the following properties for custom files with Intelligent Structure Discovery:

Copy Details from Inbound

Populates the fields in the **Outbound** page with the detailed that you entered in the **Inbound** page. You then edit the fields in the **Outbound** page as required.

Connection Type

Select the type of the connection where Cloud B2B Gateway creates the files for the partner.

Target Directory

Path to the directory on the connection where Cloud B2B Gateway creates the files.

File Pattern

Pattern that defines the names of the files that Cloud B2B Gateway creates. You can use variables with the following file patterns:

- `($eventId)`
- `($partnerName)`
- `($timestamp)`

For example:

```
($eventId).edi
```

The patterns are not case sensitive.

Host

Applicable for FTP and SFTP connection types. Host where Cloud B2B Gateway creates the files.

Port

Applicable for FTP and SFTP connection types. Port where Cloud B2B Gateway creates the files.

User Name

Applicable for FTP and SFTP connection types. Name of the user to connect to the FTP or SFTP server.

Password

Applicable for FTP and SFTP connection types. Password of the user to connect to the FTP or SFTP server.

Tip: After you configure the connection click **Test Connection** to test and validate the connection.

Mapping

Select a process-from-backend mapping to read outgoing data from the backend system. If the target of the mapping is an interface file on the Cloud B2B Gateway document store, you can select an outbound mapping to read the files from the gateway and send the files to the partner.

Schedule

Schedule by which to run the flow. Select one of the following options:

- Manually or by an external trigger. No schedule. You can run the flow from the **Explore** page or from a REST API. You can also run the flow from the Partner wizard.
- By schedule. Runs the flow according to the defined schedule. Select a schedule from the list.

  Note: To run a flow by a schedule, users need Read and Run permissions for schedules. If permissions are not configured, users cannot see existing schedules. For more information about permissions, see "User roles" on page 25.

CHAPTER 6

Tracking and Monitoring Events

This chapter includes the following topics:

- Tracking and Monitoring Overview, 86
- File Events, 87
- Message Details, 88
- Custom File Details, 89
- Event Filters, 89
- Event Properties, 89
- Viewing and Managing Events, 95
- Event Monitors, 95

Tracking and Monitoring Overview

Cloud B2B Gateway generates events as it processes messages and files to help you track and monitor the data that you exchange with partners and of acknowledgments that the gateway sends to and receives from partners. The event list provides full visibility into the data exchange and alerts you to errors that might occur.

Task events

Each time Cloud B2B Gateway triggers a task to run a partner flow, Informatica Intelligent Cloud Services generates a task event. The event is saved in Informatica Intelligent Cloud Services.

File events

Cloud B2B Gateway generates file events for files that it receives and sends. When you exchange EDI messages with partners, you can track EDI groups, and the following message details:

- Functional groups in the file.

  Note: For EDIFACT messages, the existence of group level information is optional.
- Messages and transactions that are received and sent in the file.

When Cloud B2B Gateway processes custom files with Intelligent Structure Discovery, you can track events for output groups for discovered files.

You can view all events on the Events page. The Events page provides detailed information for every file and message that the system processes.

You can select a specific file event to view more details. When you drill down in an EDI file event, you see details for the messages in the file.

You can use the filter to search for specific events. You can search for events related to a specific partner, or based on event ID, type, or status, time frame, or message type or number.

You can create monitoring rules that monitor events, and notify users on events that are in a defined status, for example, create a monitoring rule that notifies users when events are in an Error status.

File Events

The Events page provides detailed event processing information for every file that Cloud B2B Gateway processes, whether inbound or outbound.

A file event shows the status of a specific file that the Cloud B2B Gateway processes. For each file event in the Events page, you can view the file that Cloud B2B Gateway sends or receives by clicking the file name. If Cloud B2B Gateway sends or receives an acknowledgment for the file exchange you can view the acknowledgment file by clicking the link in the **Acknowledgment** column.

In outbound file events, you can view the source file by clicking the source file link on the event. The source file is the file that the custom outbound mapping generates.

Event History

You can view the event status history for each file that the Cloud B2B Gateway processes.

The event history shows the processing stages that the file passed through, when each stage started, and the cumulative processing status.

The following table describes the processing stages that can show in the Event History for inbound files:

Stage	Description
Transferring incoming files	The gateway receives files from a source defined by the inbound connection.
Processing incoming files	For a custom file that Intelligent Structure Discovery processes, the message structure parses the file and produces output group (interface) files, then writes each interface file to the Cloud B2B Gateway document store. For other custom files, the custom inbound mapping writes the incoming files to an interface file on the Cloud B2B Gateway document store or writes the data to the backend system.
Processing files to backend	Processing the process-to-backend mapping.
Reprocessed from event	Indicates that the event was generated as a result of reprocessing of another event. The Event ID is presented in the status.
Reprocessed	Indicates that the event was reprocessed and a new event was generated.
Change event status to discarded	Indicates that the event status was manually changed to **Discarded**. If the user entered a reason for the change, the reason is displayed.

The following table describes the processing stages that can show in the Event History for outbound files:

Stage	Description
Processing files from backend	Processing the process-from-backend mapping.
Processing outbound mapping	The outbound mapping reads the files from the gateway and sends them to the partner.
Transferring incoming files	The gateway sends files to a target defined by the outbound connection.
Waiting for Acknowledgment (EDI X12 messages, outbound flow)	Waiting for partner to send a technical acknowledgment, a functional acknowledgment, or both.
Reprocessed from event	Indicates that the event was generated as a result of reprocessing of another event. The Event ID is presented in the status.
Reprocessed	Indicates that the event was reprocessed and another event was generated.
Change event status to discarded	Indicates that the event status was manually changed to **Discarded**. If the user entered a reason for the change, the reason is displayed.

Event Session Logs

Each time an EDI processing mapping or custom mapping runs, Cloud B2B Gateway generates a task in Data Integration. You can access the task session log from the specific event.

If an error occurs during file processing, you can use the related session log to view further information about the error.

For custom files that Intelligent Structure Discovery processes, there are only session logs for the process-to-backend mapping.

Message Details

When you drill down an EDI file event, the event expands to show message details, including details about the EDI groups in the file, if applicable, and about the transactions in the file.

For each EDI group, the validation status is presented. If an acknowledgment was sent in Inbound events or received for outbound events, it is presented for each group.

For inbound messages, message details also present the status of the custom backend mapping.

When Cloud B2B Gateway processes an inbound EDI file, the EDI process mapping converts each transaction in the file into a separate XML interface file. You can view the interface file by clicking the File icon in the **Message File** column of the message list.

Custom File Details

When Cloud B2B Gateway processes a custom file with Intelligent Structure Discovery, the parsing process converts each output group in the message structure into a separate CSV interface file.

When you drill down an inbound file event for custom files processed by Intelligent Structure Discovery, the event expands to show details of the interface files.

You can view an interface file by clicking the name of the file in the **File Name** column of the events list.

Event Filters

You can use filters to narrow the view of the Events page. To help you monitor and track specific messages and files, you can search for events by file name or by partner name.

You can expand the Filter pane to filter the event list to show events for a message type or number, show events from a selected partner or time frame, or show events based on event ID, event type, or event status. The event list updates to show the relevant events.

You can select the **Display deleted partners** option to view events for deleted partners. Only deleted partners with an event history show, in view-only mode.

By default the event list shows all events from the last 24 hours. After you filter the view of the list, to restore the default view, click **Restore Defaults**.

Event Properties

The Events page displays file events. File event properties include details about the file that Cloud B2B Gateway processed.

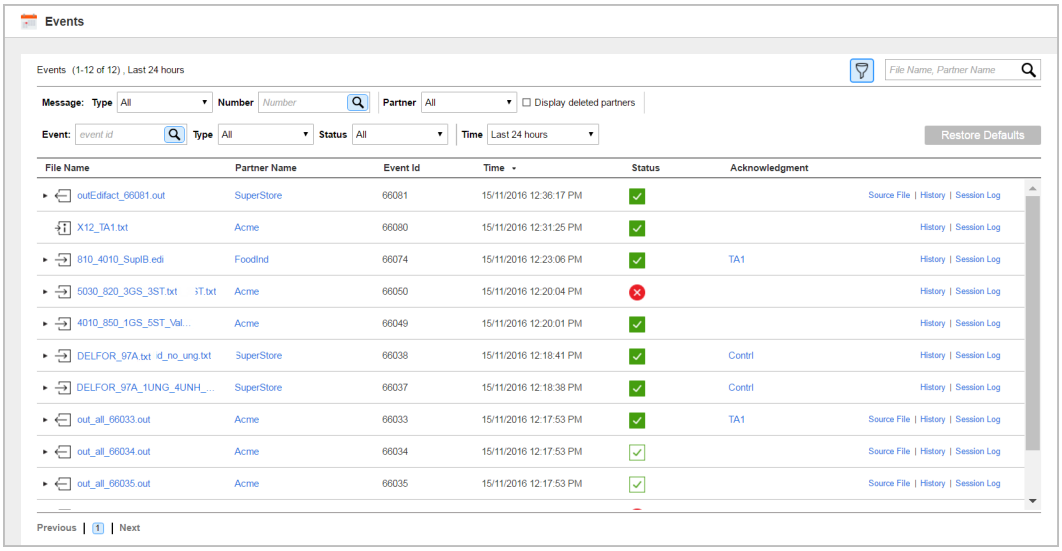
When you drill down an EDI file event, the Events page displays message details for the file, including details about the EDI groups and the messages that the Cloud B2B Gateway processed for the file, and the message processing status.

When you drill down a custom file event for files processed by Intelligent Structure Discovery, the event expands to show details for output groups discovered in the message structure. For each output group that is processed, the name of the interface file and the event ID is displayed.

File Event Properties

File event properties include the file that Cloud B2B Gateway processed, when the file was processed, which partner sent or received the file, the processing status, and other details.

The following image shows the file events in the Events page:



The display for file events includes the following properties:

File Type

The icon on the left side of the Events page indicates the file type:

-  inbound file.
-  inbound acknowledgment file.
-  outbound file.

File Name

The name of the file that the gateway received from the partner or sent to the partner. Click the file name to open the file.

Partner Name

The name of the partner that sent or received the message or the file. Click the partner name to open the edit partner wizard.

Event ID

Unique identifier for the event.

Time

The time the event started.

Status

Status of the event. An event can be in one of the following statuses:

- Complete . The file processing completed successfully.
- Discarded . The event status was manually changed to **Discarded**. Discarded events are read-only and cannot be handled any further.
- Downloading . The file is downloading.
- Error . An error occurred during file processing.
- Processing . A mapping is processing the file.
- Reprocessed . The event was reprocessed and another event was generated to reflect the new process.
- System Error . A system error occurred unrelated to file processing.
- Waiting for Acknowledgment . An intermediate status of an outbound event that is waiting for an acknowledgment. The final status of the outbound event corresponds to the status of the received acknowledgment. If the acknowledgment is accepted, the status of the corresponding outbound event changes to Complete. If the acknowledgment is rejected, the status of the corresponding outbound event changes to Error.
- Warning . The event generated a warning. For example, when an acknowledgment does not contain a group control number of the source message.

Rest on an event status icon to show additional information. For example, for an event in an Error status, the error that occurred during file processing .

Acknowledgment

Applicable for EDI X12 messages. Indicates whether an acknowledgment was received. Rest on the acknowledgment link to view the acknowledgment event number. Click the acknowledgment link to open the acknowledgment file.

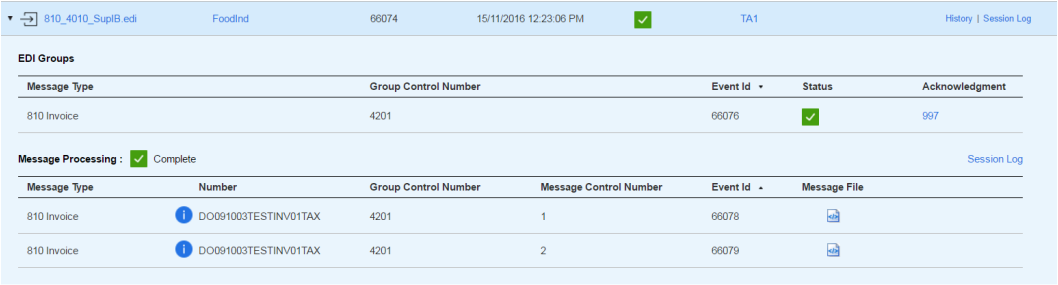
For both incoming and outgoing file events, to view the file processing steps, click **History**. To view the session log for the associated mapping, click **Session Log**. For outgoing file events, to view the source file that the custom mapping generated, click **Source File**.

EDI Message Details Properties

When you drill down an EDI file event, you see further details for the EDI groups and messages that the gateway processed for the EDI file. The message details identify the EDI groups, transactions, message types, and acknowledgements that Cloud B2B Gateway processed, as relevant for the message.

To drill down a file event, click the triangle to the left of the file level event row. The message level event panel appears.

The following image shows sample details for an incoming EDI file:



The message details panel displays the EDI groups in the file, the message processing status, and the transactions in the file. Incoming EDI files can include multiple EDI groups. Outgoing EDI files contain one EDI group.

When the view includes multiple EDI groups for a file, click the row of an EDI group to show the transactions that are associated with the group.

EDI Group Details

The **EDI Groups** panel displays details for each functional group in the EDI file.

For each functional group in the file, the **EDI Groups** panel includes the following properties:

Message Type

Message type for the functional group.

Group Control Number

Control number for the functional group.

Event ID

Unique identifier for the event associated with processing the EDI group.

Status

Status of the group validation for the EDI group. This appears for inbound messages. Group validation can be in one of the following statuses:

- Complete . Cloud B2B Gateway completed the message validation for the functional group successfully.
- Error . Group validation failed. Click the File icon to open a report with details about the error.
- Waiting for Acknowledgment . Waiting for an acknowledgment from the partner.

Rest on an EDI group status icon to show additional information. For example, for an event in an Error status, the reason that the message was rejected.

Acknowledgment

Indicates whether Cloud B2B Gateway sent or received a functional acknowledgment for the EDI group. Click the acknowledgment number to open the acknowledgment file.

Message Processing Status

The **EDI Groups** panel displays message processing status for the custom mapping that is assigned to the flow.

The **Message Processing** icon indicates the message processing status for the mapping. Message processing can be in one of the following statuses:

- Complete . Cloud B2B Gateway processed the custom mapping successfully or no custom mapping is assigned to the flow.
- Error . Processing of the custom mapping failed.

To view the session log associated with the processing of the custom mapping, click **Session Log**. If no custom mapping is assigned to the flow, session log details are not available.

Transaction Details

The message details panel displays details for each transaction in the EDI file. If you click the row of the EDI group, only the transactions that Cloud B2B Gateway processed for the specific EDI group are listed.

For each transaction, the message details panel can include the following properties:

Message Type

Indicates the message type of the transaction.

Number

Transaction number, for example, invoice number. Rest on the information icon to the left of the transaction number to view the number of rows in the transaction.

Group Control Number

The group control number for the functional group of the transaction.

Message Control Number

The message control number for the transaction.

Event ID

Unique identifier for the event associated with processing the transaction.

Message File

Applicable for inbound flows. The XML file that Cloud B2B Gateway generates for the inbound message. Click the File icon to view the file.

Acknowledgment

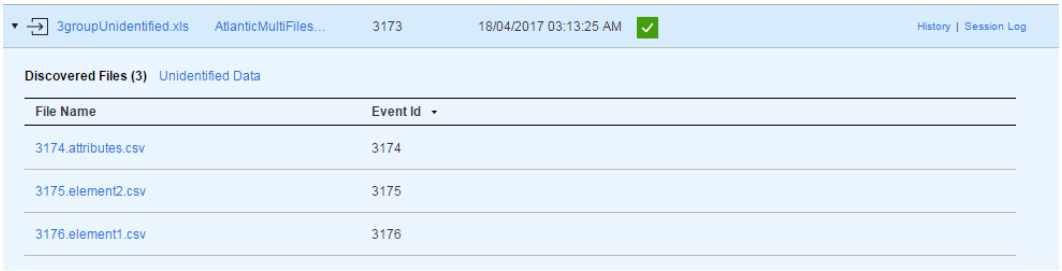
Applicable for outbound flows. Rest on the acknowledgment link to view the acknowledgment event number. Click the acknowledgment link to open the acknowledgment file.

Custom File Details Properties

When Intelligent Structure Discovery processes a file, it discovers output groups. Output groups contain units of identified data, such as a street address, city, and zip code. An interface file is created for each discovered output group. When you drill down a custom file event for files that Intelligent Structure Discovery has processed, you see further details for the interface files that were produced.

To drill down a file event, click the triangle to the left of the file level event row. The **Discovered File** panel appears.

The following image shows sample details for an incoming custom file that Intelligent Structure Discovery processed:



The details panel displays the interface file that was produced, and the processing status.

Incoming custom files can produce multiple interface files, depending on the custom file structure.

Discovered Files

For each interface file, the **Discovered Files** panel includes the following properties:

File Name

Name of the interface file. Click the name of the file to view the file.

Event ID

Identification number for the event.

Processing Status

The **Discovered Files** panel displays the processing status for the inbound process that includes Intelligent Structure Discovery to parse the custom file.

The **Processing** icon indicates the inbound processing status. The processing state can be in one of the following statuses:

- Complete . Cloud B2B Gateway processed the file successfully.
- Error . File processing failed.
- Warning . The Intelligent Structure Discovery process was unable to identify some of the data, and no process-to-backend mapping has been defined.

Unidentified Data

If Intelligent Structure Discovery was not able to identify all the data, the **Discovered File** panel displays the link **Unidentified Data**.

The data that was not processed is saved to a file with the naming convention `<original filename>_unidentified.txt`.

To access the data, click the link **Unidentified Data**.

Viewing and Managing Events

You can view file events and message details in the Events page. You can also use a filter to find specific events. You can also reprocess or discard a file level event.

1. Click **Events**.

   A list of file and system events appear.
2. To filter events, click the Filter icon. In the Filter pane, select to view events related to a specific partner, to an event ID, type, or status, to a selected time frame, or to message type or number.

   When you select the event ID, event and file processing details are displayed for that event.
3. To view the file for a file event, click the name of the file.
4. To view partner details for a file event, click the name of the partner.
5. To view EDI message type events related to a file event, drill down the file event. Click the arrow to the left of the row of a specific file event.
6. To view the source file for an outbound flow, select to highlight the file event row, select the Action menu and then select **Source File**.
7. To troubleshoot an error, view the session log for an event. Select to highlight the file event row, select the Action menu and then select **File Session Log** or **Custom Process Session Log**.
8. To discard a file event and stop handling the file, select to highlight the file event row, select the Action menu and then select **Discard Event**. You can enter a reason for the discard.
9. To reprocess a file event, select to highlight the file event row, select the Action menu and then select **Reprocess**.

   The event is assigned the **Reprocessed** status and another event is created for the new process flow.

   Note: Only file level events can be reprocessed. You cannot reprocess custom partner events that use Intelligent Structure Discovery, or system error events.

Event Monitors

You can create event monitors that track events based on their status, and send notifications when an event is in a defined status.

You create monitoring rules that define which partners to monitor, what are the event statuses that trigger an action, and users to which to send email notifications. For example, you can create a rule that notifies the administrator when events that are generated for a specific partner are in an Error status.

Monitoring Rules

A monitoring rule defines which partners to monitor, the event statuses that trigger an action, and the users to which to send email notifications when an event is in a defined status.

When you create a monitoring rule, you define the following elements:

- Partners to which the rule applies. You can apply the rule to a single partner, to a number of selected partners, or to all partners.
- Event status or statuses to which the rule applies. Cloud B2B Gateway applies the rule only to events that are in a final state.

- Rule action. You can define one or more users to which Cloud B2B Gateway sends email notifications when the rule conditions are true.

Managing Monitoring Rules

Create, edit, view, disable, enable, and delete monitoring rules.

Creating a Monitoring Rule

Use the Navigator to create monitoring rules.

1. In the Navigator, click **New** > **Monitoring Rule**. Then click **Create**.

   The **New Monitoring Rule** page appears.
2. Enter the rule name. Optionally, enter a description for the rule.
3. Select the location to save the rule.
4. Choose the rule mode, enabled or disabled. A disabled rule does not perform the defined actions.
5. Select a partner or partners to which to apply the rule, or select **Apply to all** to apply the rule to all partners, including current partners and partners that are added to Cloud B2B Gateway after you create the rule.
   a. Click **Select Partners**.

      The **Partners** page appears.
   b. Check the box to the left of the partners to apply the Monitoring Rule, and then click **Select**.
   c. To remove a partner, check the box to the left of the partner and click the trash icon.
6. Select the event statuses to monitor. You must select at least one status.
7. Define users to which to send email notifications. You can define up to 30 email users.

   Perform the following steps for each user:

   1. Click **Add** in the **Actions** area.
   2. Select the name of an Informatica Cloud user or select **A non-Informatica Cloud user** from the **User Name** list and then enter the email address in the **Email** field.

   Cloud B2B Gateway sends email notifications to the recipients that you define here when events of any of the affected partners are in any of the affected statuses.
8. Click **Save**.

Editing a Monitoring Rule

Use the **Explore** page to edit monitoring rules.

1. In the Navigator, click **Explore**. Click the **All Assets** list and then select **Monitors** > **Monitoring Rules**.

   The **Explore** page shows all existing monitoring rules.
2. Click the name of the monitoring rule to edit.

   The monitoring rule page shows.
3. Edit the monitoring rule and then click **Save**.

Disabling, Enabling, Viewing, and Deleting a Monitoring Rule

Use the **Explore** page to disable, enable, view, and delete a monitoring rule.

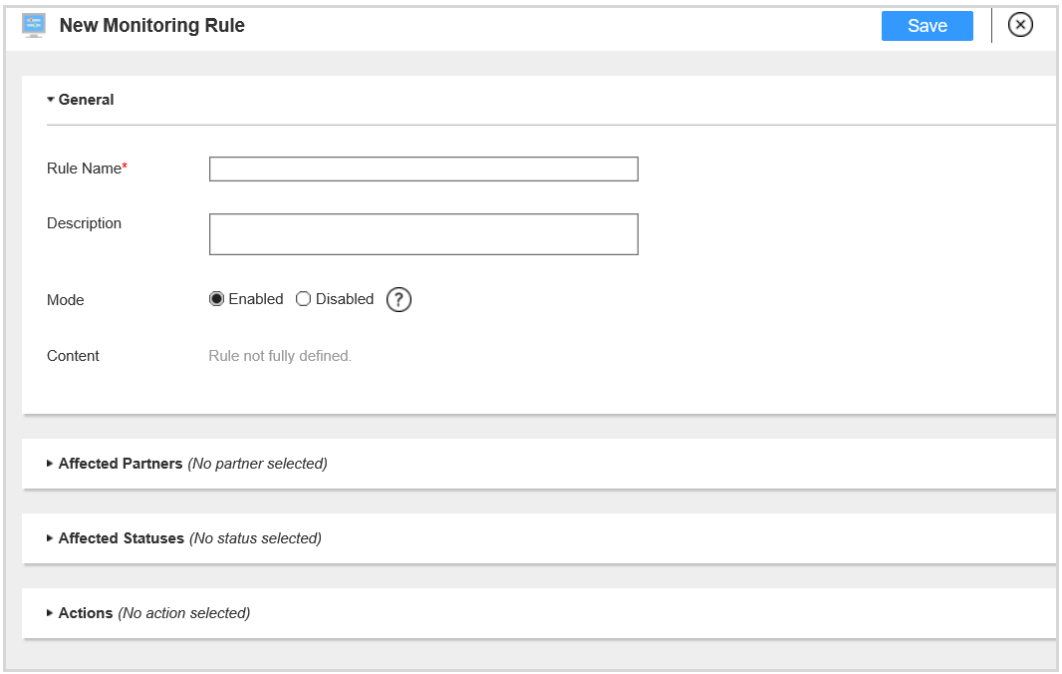
1. In the Navigator, click **Explore**. Click the **All Assets** list and then select **Monitors** > **Monitoring Rules**.

   The **Explore** page shows all existing monitoring rules.
2. Rest on the monitoring rule on which to perform the action and then click the Action menu at the right end of the line. From the menu select the required action:
   - To disable a rule select **Disabled**. A disabled rule does not perform the defined actions.
   - To enable a disabled rule select **Enabled**.
   - To view a rule select **View**.
   - To delete a rule select **Delete** and then confirm the action.

Monitoring Rule Properties

Monitoring rule properties include general information about the monitoring rule, the asset or assets to which the rule applies, the event statuses that the rule monitors, and the rule action or actions.

The following image shows a sample monitoring rule page:



The monitoring rule page includes the following properties:

Rule Name

Name of the monitoring rule. The name can contain up to 80 characters and can contain special characters. The name must not contain angled brackets (< or >).

Description

Description of the monitoring rule. The description can contain up to 255 characters.

Mode

Monitoring rule mode, enabled or disabled. A disabled rule does not perform the defined actions.

Content

The conditions of the monitoring rule.

Affected Partners

The partners to which the rule applies.

Affected Statuses

The statuses of the affected assets to which the rule applies.

Actions

The actions that the rule performs when any of the affected partners are in any of the affected statuses.

CHAPTER 7

Cloud B2B Gateway REST APIs

This chapter includes the following topics:

- REST APIs Overview, 99
- Authorization Header, 99
- Run Partner REST API, 99
- Event Status API, 101

REST APIs Overview

Use the Cloud B2B Gateway REST APIs to run inbound and outbound partner flows and to query the status of events.

You can use the following APIs:

- Run Partner REST API. Runs inbound and outbound partner flows.
- Event Status REST API. Returns the status of events.

Authorization Header

Each Cloud B2B Gateway REST API call must contain an authorization header.

The type of the authorization header must be Basic, and the header must include an user and an password.

For example:

```
{
Username: Administrator@MyCompany.com
Password: MyPassword
}
```

Run Partner REST API

Use the Cloud B2B Gateway Run Partner API to run inbound and outbound partner flows.

You can use the Run Partner API only for flows with the scheduling option **Manually or by an external trigger**.

The Run Partner API returns the response code of the action that you perform. If the partner flow triggers successfully, the API returns the event ID of the task event that Cloud B2B Gateway generates. You can run the Cloud B2B Gateway Event Status API to query the status of the event based on the event ID.

Run Partner REST API Request

Use a POST request with an application/json content type to run a partner flow.

To run a flow, use the following REST URL:

```
https://b2bgateway.<pod>.<baseUrl>/b2b-gw/api/v1/partner/run
```

Where:

- `<pod>` is the name of the Informatica Intelligent Cloud Services point of delivery (PoD) where you access Cloud B2B Gateway. For example: `pod1`.
- `<baseUrl>` is the Informatica Intelligent Cloud Services URL. For example: `dm-us.informaticacloud.com/`.

For example:

```
https://b2bgateway.pod1.dm-us.informaticacloud.com/b2b-gw/api/v1/partner/run
```

Tip: You can copy the values of `<pod>` and `<baseUrl>` from the Cloud B2B Gateway URL after you access it from the My Services page of Informatica Intelligent Cloud Services.

Request Syntax

To run a flow, use the following request syntax:

```
{
"partnerName":"<partner name>",
"direction":"<direction of flow>"
}
```

Where:

- `partner name` is the name of the partner for which you want to run the flow. The name must not contain angled brackets (<>), backslashes (\), or double quotes ("). If the defined partner name contains backslashes, add another backslash before each existing backslash (\\). If the defined partner name contains double quotes, add a backslash before each double quote (\").
- `direction of flow` is the flow to run for the customer: `INBOUND` for an inbound flow and `OUTBOUND` for an outbound flow. The direction is not case sensitive.

For example:

To run the inbound flow for the customer My_Customer, use the following request syntax:

```
{
"partnerName":"My_Customer",
"direction":"INBOUND"
}
```

To run the outbound flow for the customer My_Customer, use the following request syntax:

```
{
"partnerName":"My_Customer",
"direction":"OUTBOUND"
}
```

Run Partner REST API Action Response

When you use the Cloud B2B Gateway Run Partner REST API to run a partner flow, Cloud B2B Gateway returns the action response in the REST API response.

Running a flow from the REST API returns the HTTP response code that is relevant to the result of the action

- When the request succeeds, Cloud B2B Gateway returns `200`, the code for a successful request.
- When the request fails, the API returns the HTTP response code that is relevant to the cause of the error. For example, it the value of `direction` is wrong, the API returns `400`, the code for a bad request.

Event Status API

When you use a Cloud B2B Gateway Run Partner API to start the running of a partner flow and the action succeeds, Cloud B2B Gateway returns the event ID of the task event that it generates in the REST API response.

You can use the Cloud B2B Gateway Event Status REST API to query the status of the event, based on the event ID.

When you query a task event and the event reaches its final status, the API returns the event IDs of all the file events that the task generated. You can then run the API to query the status of each file event.

A task event reaches its final status when the task finishes running. A file event reaches its final status when the file processing is complete. Processing is complete when all task and file events are in a final status.

Event Status REST API Request

Use a GET request with an application/json content type to query the status of a partner event.

To query the status of a partner event, use the following REST URL:

```
https://b2bgateway.<pod>.<baseUrl>/b2b-gw/api/v2/event/status/eventId
```

Where:

- `<pod>` is the name of the Informatica Intelligent Cloud Services point of delivery (PoD) where you access Cloud B2B Gateway. For example: `pod1`.
- `<baseUrl>` is the Informatica Intelligent Cloud Services URL. For example: `dm-us.informaticacloud.com/`.

For example:

```
https://b2bgateway.pod1.dm-us.informaticacloud.com/b2b-gw/api/v2/event/status/7638
```

Tip: You can copy the values of `<pod>` and `<baseUrl>` from the Cloud B2B Gateway URL after you access it from the My Services page of Informatica Intelligent Cloud Services.

Event Status API Action Response

When you use the Cloud B2B Gateway Event Status API to query the status of task and file events, the API returns the event response in a `JSON` format.

Success response for task events

When you query the status of task events and the request succeeds, the response includes the following information for each task to which the event points:

Property	Description
eventType	Type of event: Task Level Event.
eventStatus	Status of the event.
eventId	ID of the event.
eventCreationTimestamp	Time when the event occurred. System time in milliseconds as returned by Java API `java.lang.System.currentTimeMillis`.
partnerName	Name of the partner.
partnerNumber	Number of the partner.
partnerFileType	Type of files that are exchanged with the partner.
direction	Direction of the partner flow, `INBOUND` or `OUTBOUND`.
isFinalStatus	Indicates whether or not the event reached its final status.
isErrorStatus	Indicates whether or not the event is in error status.
files	List of files that were exchanged with the partner, including the event ID of each file event.

Following is an example of a success response that includes two task events with multiple file events:

```
[{
                "eventType": "Task Level Event",
                "eventStatus": "Complete",
                "eventId": 5185,
                "eventCreationTimestamp": 1524672716109,
                "partnerName": "partnerMpmWithFailCustom_5VM",
                "partnerNumber": "1HSUQ0EIFFFE",
                "partnerFileType": "EDIX12",
                "direction": "OUTBOUND",
                "isFinalStatus": true,
                "isErrorStatus": false,
                "files": [{
                                "eventType": "File Level Event",
                                "eventStatus": "Complete",
                                "eventId": 5186,
                                "eventCreationTimestamp": 1524672716109,
                                …
                }]
},
{
                "eventType": "Task Level Event",
                "eventStatus": "Error",
                "eventId": 5184,
                "eventCreationTimestamp": 1524672716102,
```

```
                    "partnerName": "partnerMpmWithFailCustom_5VM",
                    "partnerNumber": "1HSUQ0EIFFFE",
                    "partnerFileType": "EDIX12",
                    "direction": "OUTBOUND",
                    "isFinalStatus": true,
                    "isErrorStatus": true,
                    "files": []
    }]
```

Success response for file events

When you query the status of a file event and the request succeeds, the response includes the following information:

Property	Description
eventType	Type of event: File Level Event.
eventStatus	Status of the event: `Complete` or `in progress`.
eventId	ID of the event.
eventCreationTimestamp	Time when the event occurred. System time in milliseconds as returned by Java API `java.lang.System.currentTimeMillis`.
fileName	Name of the file.
messageType	Type of message that is exchanged with the partner.
isFinalStatus	Indicates whether or not the event reached its final status.
isErrorStatus	Indicates whether or not the event is in error status.

Failure response

When the request fails, the API returns the HTTP response code that is relevant to the cause of the error. For example, it the event you query is of an unsupported type, such as a group event, the API returns `400`, the code for a bad request. When file processing fails, the event is in Error status.

CHAPTER 8

Glossary

event

An occurrence of a partner flow or a file transfer at each stage of processing. The Cloud B2B Gateway server generates the event and updates the event status while it processes the partner flow or file transfer.

inbound flow

A Cloud B2B Gateway inbound flow receives and processes messages that a partner sends to the organization.

interface file

When you receive EDI messages from partners, pre-packaged processing mappings validate the inbound EDI messages and convert them to XML interface files, one file for each message type.

mapping

A mapping that processes a data set. The mapping includes the data sources and targets, metadata folders, and connections to process the data.

A custom mapping uses an Data Integration task to process data. Workflows and tasks can perform complex transformations on the data.

outbound flow

A Cloud B2B Gateway outbound flow creates and sends messages from the organization to the partner.

partner

An external or internal entity that sends documents for processing or receives documents after processing in Cloud B2B Gateway. A partner can be an organization such as a vendor or customer or an internal system such as an accounting system or an ERP system.

repository

A relational database table set that contains the metadata required to process files in Cloud B2B Gateway. It also contains the events that Cloud B2B Gateway generates while it processes files.

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