webMethods Usage Patterns

Contents

This document describes the usage patterns for webMethods. Each section describes a group of use cases specific to a system sending data to webMethods.

General Success Criteria

For each pattern, a use case is determined to be successful if:

- The source system is able to send the data
- For any one item, the sender, receiver, and document type can be determined
- Any processing performed on the item is logged
- The processing completes normally as expected per use case
- If any errors occur during processing, an appropriate alert is generated

Use Case Diagrams

Each use case name in this document is followed by a number, which corresponds to a page number within the use case diagrams document. Each use case diagram illustrates the process flow for that use case.

ALLOY Use Cases

The ALLOY system is the EDI translation system used by CCBSS, with the webMethods system processing data from ALLOY.

Due to the number of potential destination systems for translated data, a number of use cases are considered ALLOY use cases:

ALLOY-HOLD (1)
ALLOY-OUT-OT (3)
ALLOY-TO-BOTTLER (4)
ALLOY-TO-CIMPRO (5)
ALLOY-TO-CONA (6)
ALLOY-TO-DATASVCS (7)
ALLOY-TO-EMAIL (8)
ALLOY-TO-FTP (9)
ALLOY-TO-HTTP (10)
ALLOY-TO-MQ (11)
ALLOY-TO-OTM (12)
ALLOY-TO-PARTNER (13)
ALLOY-TO-SCALE (15)
ALLOY-TO-TERADATA (16)
ALLOY-TO-WM (17)

In addition, the case references to ALLOY-GENACK (64), HOLD-TO-EMAIL (38), HOLD-TO-OT (40), HOLD-TO-FTP (39), WM-TO-DATABASE (60), WM-TO-FTP (61) and WM-TO-SAPR3 (62) are also possible. These use cases indicate additional processing such as batching multiple files into a single transmission or translation to a specific application format.

Process Overview

- ALLOY Places data in the designated PLZ directory
- CBE Data File Gateway
    - Determines the initial sender, receiver, and document type based on the file name
        - Additional recognition is performed for XML and EDI data
    - Submits the data to Trading Networks for Processing
- Trading Networks
    - Delivers passthrough data to the target system, or
    - Holds Data for batching and release, or

    - Translates the file to an application-specific format, or
    - Processes the generic acknowledgement requests or responses
- For Held Data
    - Data is released to be transmitted to an FTP receiver, OpenText or E-mail recipients at a scheduled time
- For Translated Data
    - The translation results are sent to the SAP/R3 system, inserted into a database table, or sent to an FTP server

Bottler Use Cases

Independent (non-CONA) bottlers send data into webMethods for translation to EDI documents or transmission to the Teradata system. The following use cases have been determined to be bottler use cases:

BOTTLER-MATRIX (18)
BOTTLER-TO-ALLOY (19)
BOTTLER-TO-DISCARD (20)

Process Overview

- The Bottler places data in the designated PLZ directory
- CBE Data File Gateway
    - Determines the sender, receiver, and document type based on the file name
    - Submits the data to Trading Networks for Processing
- Teradata MATRIX data
    - Validated
    - Copies sent to both the production and QA Teradata systems
- ALLOY data
    - Placed in the designated PLZ directory for pick-up by ALLOY
- Discarded data/Process Type of None
    - No additional processing is performed

OpenText Use Cases

Many trading partners send data to a VAN provider to transmit data to the Coke system. Regardless of the partner's VAN provider, all the data is sent to OpenText, who is responsible for delivering the data to the Coca-Cola system. OpenText also provides other connectivity options such as AS/2 and FTP for partners who prefer to not have their own VAN provider. The use cases below are considered OpenText use cases:

ALLOY-IN-OT (2)
OT-FF-TO-CONA (42)
OT-TO-DATASVCS (45)
OT-TO-FTP (47)
OT-TO-PLZ (48)
RAFE-TO-ALLOY (54)

Process Overview

- OpenText places data in the designated PLZ directory
- CBE Data File Gateway
    - Determines the sender, receiver, and document type based on the file name
    - Submits the data to Trading Networks for Processing
- ALLOY and RAFE data
    - Placed in the ALLOY PLZ folder
- Other data
    - Delivered per individual use case: CONA, Data Services/Teradata, FTP, or PLZ directory

CONA Use Cases

A number of bottlers use the CONA SAP system for their ERP solution. The CONA SAP system transmits data to the webMethods system for translation or direct transmission to trading partners. The CONA use cases are as follows:

CONA-FF-TO-ALLOY (22)
CONA-TO-DISCARD (24)
CONA-XML-OUT-BATCH (25)
CONA-XML-OUT-WM (26)
CONA-XML-TO-ALLOY (27)

In the CONA-XML-OUT-WM (26) case, the additional use case WM-TO-SAPR3 (62) may also be referenced, and the CONA-XML-OUT-BATCH (25) use case references the HOLD-TO-ALLOY (37) use case

Process Overview

- XML Data
    - CONA SAP/PI makes a SOAP call to the webMethods Integration Server with the XML data as the payload
    - The webMethods Integration Server submits the data to Trading Networks as XML data via Broker
    - Trading Networks Parses the XML data to determine the sender, receiver, and document type
    - Data may be held for batching, immediately sent to the ALLOY system for translation, or translated by a webMethods translation process
- Flat File Data
    - The CONA system writes the data file to their SFTP Server
    - webMethods retrieves the file from the remote server
    - The sender, receiver, and document type are determined from the file name
- Data may be discarded
    - Determined by the None process type
- Data held for batching is collected and released at regular intervals
- Data Translated by webMethods is sent to SAP R/3

Teradata and Data Services Use Cases

Teradata and Data Services send data to webMethods for applications such as reporting, consolidated invoicing, and consolidated orders. The affected use cases are:

DATASVCS-TO-FTP (28)
DATASVCS-TO-PLZ (29)
TERADATA-TO-ALLOY (56)
TERADATA-TO-FTP (57)
TERADATA-TO-OT (58)
TERADATA-TO-DISCARD (59)

Process Overview

- Teradata places data in the designated shared directory
- CBE Data File Gateway
    - Determines the sender, receiver, and document type based on the file name
    - Submits the data to Trading Networks for Processing
- Trading Networks
    - Delivers the data to ALLOY, PLZ partners (including bottlers), FTP servers, and OpenText
    - No further processing is performed if the process type is None

Filesystem Use Cases

Some application systems use a shared directory to transmit data to webMethods. The use cases where this occurs are FILESYSTEM-TO-FTP and FILESYSTEM-TO-ALLOY.

FILESYSTEM-TO-FTP (32)
FILESYSTEM-TO-ALLOY (31)

Process Overview

- The sending application system places data in the designated shared directory
- CBE Data File Gateway
    - Determines the sender, receiver, and document type based on the file name
    - Submits the data to Trading Networks for Processing
- Trading Networks
    - Delivers the data to ALLOY or a remote FTP server such as Axway

PLZ Partner Use Cases

A number of systems and partners both internal and external to the company submit data to webMethods for processing. These are presented in the following use cases:

PLZ-TO-ALLOY (49)
PLZ-TO-FILESYSTEM (50)
PLZ-TO-FTP (51)
PLZ-TO-OT (52)
PLZ-TO-WM (53)
KO-TO-ALLOY (41)

When translated, the additional use case of WM-TO-SAPR3 (62) is used to deliver the translated data.

Process Overview

- OpenText places data in the designated PLZ directory
- CBE Data File Gateway
    - Determines the sender, receiver, and document type based on the file name
    - Submits the data to Trading Networks for Processing
- Trading Networks
    - Determines the delivery process based on the sender, receiver, and document type
    - Delivers the data to the PLZ for ALLOY or OpenText, a shared filesystem directory, an FTP server, or a webMethods translation process
    - For webMethods translation processes, the translated data is delivered to an SAP R/3 system

OTM Use Cases

The Oracle Transportation Management System communicates information to trucking companies to facilitate transportation services. The affected use cases are:

OTM-XML-TO-ALLOY (44)
OTM-OUT-PASSTHRU (43)

Process Overview

- For XML Data
  - The webMethods Integration Server
    - Receives the data from OTM via a HTTP POST
    - Submits the data to Trading Networks as XML data via Broker
  - Trading Networks
    - Parses the XML data to retrieve the sender, receiver, and document type
    - Places the file in the PLZ directory for ALLOY to retrieve
- For Flat File Data
  - The OTM system places a file on a shared drive
  - The CBE Data File Gateway polls the file, assigns the sender, receiver, and document type based on the file name, and submits the data to Trading Networks
  - Trading Networks sends the file to a remote FTP server for processing

FTP Use Cases

Partners and application systems can use the FTP and SFTP protocols to send data to webMethods. The use cases below are FTP use cases:

FTP-TO-ALLOY (33)
FTP-TO-FTP (34)
FTP-TO-FILESYSTEM (35)
FTP-TO-WM (36)

Process Overview

- If the partner/application hosts the FTP/SFTP server
  - webMethods initiates the connection to the remote FTP server at regular intervals and retrieves files
  - The FTP Gateway process is started for each file retrieved
- If the partner/application uses a client to connect to the webMethods FTP server
  - The client signs onto the webMethods FTP server and puts a file into the server
  - A notification (PutCompletedNotification) is generated and published to Broker
  - The corresponding Broker trigger initiates the FTP Gateway process
- The FTP Gateway Process
  - Determines the sender/receiver/doctype based on the sending party and file name
  - Submits the file to Trading Networks for processing
- Trading Networks
  - Processes the file according to the sender/receiver/doctype
  - Delivers the data to ALLOY, a shared directory, or a remote FTP server based on the delivery type

SAP R/3 to ALLOY

The SAP R/3 system sends data to webMethods for translation by ALLOY. The only affected use case is SAPR3-TO-ALLOY (55).

Process Overview

- The SAP R/3 system initiates a RFC to the webMethods SAP Adapter
- The process invoked by the adapter uses the IDOC attributes determine the sender, receiver, and document type, then submits the data to Trading Networks
- Trading Networks sends the data to the PLZ directory for ALLOY to translate the IDOC

CIMPRO to ALLOY

The CIMPRO system sends product transfer and postitive pay information to webMethods. This is documented in the use case CIMPRO-TO-ALLOY.

Process Overview

- The CIMPRO system sends data to the webMethods system using the OTX protocol, triggering the gateway service via an adapter notification
- The gateway service uses the OTX values of sender, receiver, and APRF to determine the Trading Networks sender, receiver, and document type, then submits the data to Trading Networks
- Trading Networks sends the data to the PLZ directory for ALLOY to translate the data

E-Mail to ALLOY

Data may be sent to webMethods by e-mailing data to webemail@coca-cola.com. All data is sent to Alloy – the representative use case is EMAIL-TO-ALLOY (30).

Process Overview

- The sending system attaches the data to an e-mail message and sends the message to webemail@coca-cola.com
- An e-mail port defined in webMethods polls the mailbox for incoming messages, and retrieves the message from the mailbox
- The sender, receiver, and document type is determined from the attachment name, and the data is submitted to Trading Networks
- Trading Networks sends the data to the PLZ directory for ALLOY to translate the data

Wal-Mart AS/2 Process

Wal-Mart regularly sends data via AS/2 to Coca-Cola. The associated use case is AS2-TO-FILESYSTEM (65). Note that this process does not run on the same Integration Server cluster as the other processes – a separate cluster has been created on clpwbma5019/clpwbma5020 for this process.

Process Overview

- Wal-Mart sends data to the webMethods AS/2 cluster
- Trading Networks decrypts the data, then invokes a process to write the data to a shared drive

Support Use Cases

Under some circumstances, support personnel may be required to submit data to Trading Networks for processing. This is defined in SUPPORT Use Cases (63). The Support Gateway provides a command-line interface for submitting data to Trading Networks.

Process Overview

- Support personnel isolates the data to be submitted, then executes the command-line program to submit data to Trading Networks
    - The command line requires a sender, receiver, and document type for Trading Networks processing
    - The program makes a service call to the support gateway with the submission parameters and payload
- The support gateway submits the data to Trading Networks for further processing
- Any further delivery or processing is determined by the associated process type