Advanced Ship Notice (ASN) Integration

WWT Standards and Options

Created: August 2024

Reviewed: October 2024

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Integration Options

At WWT, we offer a variety of integration options to ensure seamless and efficient electronic transactions with our customers. Our integration methods include:

EDI (Electronic Data Interchange): A standardized method for exchanging business documents between systems.

cXML (Commerce eXtensible Markup Language): A protocol for the communication of business documents between procurement applications, e-commerce hubs, and suppliers.

API/JSON (Application Programming Interface/JavaScript Object Notation): Modern and flexible methods for integrating systems using web services and lightweight data interchange formats.

These options are designed to accommodate different technical environments and business needs, ensuring that our customers can choose the most suitable method for their operations.

Requirements

- Order is in Shipped Status
- Dedicated IT and Business Stakeholders
- Agreement to thoroughly test Integration.

WWT Connectivity Information

Environment	Endpoint
Test (POST)	
Production (POST)	

EDI 856

At WWT, we adhere to industry standards to ensure the highest level of reliability, security, and efficiency in our EDI integrations. By following established protocols and best practices, we facilitate seamless and accurate electronic transactions between our systems and those of our partners.

Scope

Sending Advanced Ship Notice (EDI 856)

- **Triggered by Sales Order in Shipped Status -** The acknowledgement is sent when a Sales Order is in shipped status in WWT ERP.

Connectivity

Please note, AS2 connectivity is preferred. WWT uses SHA-2 encryption for its certificates. Please send certificates in p7b format.

a. **WWT AS2 INFORMATION**

i. *General Options*

Payload = Signed and Encrypted
Encryption Algorithm = Triple DES
Compressed = False
Delivery Method: HTTPS
Request Signed Receipt = False
Request MDN = Asynchronous MDN

ii. *TEST Environment*

Path and MDN URL: https://b2b-test.wwt.com:5100/invoke/wm.EDIINT/receive
HTTPS Port: 5100
AS2 Name/Identifier: 614948396T
Allow traffic to: 198.200.139.46
Allow traffic from: 198.200.139.81, 66.179.141.81, 66.179.141.71
Certificate Name: b2b-test_ssl_certificate.p7b *

iii. *PROD Environment*

Path and MDN URL: https://b2b.wwt.com:5100/invoke/wm.EDIINT/receive
HTTPS Port: 5100
AS2 Name/Identifier: 614948396
Allow traffic to: 198.200.139.41
Allow traffic from: 198.200.139.80, 66.179.141.80, 66.179.141.45
Certificate Name: b2b-prod_ssl_certificate.p7b *

**Actual certificates will be emailed separately, after technical contacts are established.*

Industry Standard and WWT Standard Data Points for 856 Transaction

1. **Ship-to:** Details the destination address where the goods are to be delivered.
2. **Ship Date:** Indicates the date when the items are scheduled to be shipped.
3. **Order Details:**
    - **Item ID:** Unique identifier for each item.
    - **Quantity:** The number of units ordered.
    - **Unit of Measure:** The unit in which the items are measured (e.g., pieces, boxes).
    - **Serial Number (?**)

4. **Shipping Information:**
    - **Shipping Method:** The method of shipment (e.g., ground, air).
    - **Carrier Details:** Information about the carrier responsible for the delivery.
    - **Tracking Number:** Carrier Tracking Number

8. **Reference Numbers:** Includes the Purchase Order (PO) number for tracking and reference.

Payload Samples and Technical Specifications

Sample is a generic version of the EDI transmission.

856 sample file.docx

Standard ASN Integration

CXML

At WWT, we prioritize seamless and efficient integration with our customers' procurement tools by adhering to industry standards, specifically using Commerce eXtensible Markup Language (cXML). cXML is a widely recognized protocol designed for the communication of business transactions between procurement applications and suppliers.

Scope

Establishing Relationships with Procurement Tool

WWT currently maintains accounts with the following procurement tools, among others, and are open to onboarding additional platforms as needed. Once Procurement tool is identified account information will be shared.

- **Ariba**
- **Coupa**
- **PeopleSoft**
- **Workday**
- **GEP**
- **Oracle iProcurement**
- **Oracle Business Network (OBN)**

Industry Standard and WWT Standard Data Points for CXML Transaction

1. **Header Information:**
    1. Document Number: Unique ASN document or reference number (payload ID)
    2. Date/Time of ASN Creation: Timestamp that indicates the ASN's date of generation
    3. **Sender/Receiver Details: Specifies the sender and receiver identifier (DUNS, NetworkID or others)**
2. **Shipment Information:**
    1. Shipment ID: Unique identifier for the shipment
    2. Shipping Date: The actual or expected date of shipment
    3. Delivery Date: The actual or expected date of shipment
    4. ShipFrom: Information about the vendor/supplier origin location
    5. ShipTo: Information about the delivery location (buyer, warehouse, etc)
    6. Carrier information: Details about the carrier responsible for the delivery, such as the carrier's name, method of transport and tracking numbers
3. **Order Information:**
    1. **Order ID:** Unique identifier for each order.
4. **Item Information:**
    1. **Item ID**: Unique part number defined by the supplier.
    2. **Unit of Measure:** The unit in which the items are measured (e.g., pieces, boxes).
    3. **Quantity:** Number of units ordered
    4. **Unit Price:** The price per unit of the item.
    5. **Part Description**: A brief description of the item.

Additional Data Points Options

1. **Shipping Terms:** Specifies the terms of shipment agreed upon by both parties

Payload Samples

Sample is a generic version of the cXML transmission.

cXML ASN Sample 2.txt

cXML ASN Sample.txt

API

At WWT, we understand that each customer may have unique requirements and systems in place. To accommodate these needs, we offer robust integration solutions with customers' custom APIs (Application Programming Interfaces). Our approach ensures that our services seamlessly integrate with your existing infrastructure, providing a tailored and efficient experience.

Scope

Customer-Provided Documentation for Custom APIs

When integrating with a customer's custom API, it is essential to provide comprehensive documentation to ensure seamless connectivity and data exchange. By providing thorough documentation, WWT ensures that the integration process is smooth, efficient, and tailored to meet the specific requirements of the customer's custom API. The following elements should be included:

- **Connectivity Details:** Specify the required connection parameters, such as endpoint URLs, authentication methods, and any necessary security certificates or tokens.
- **Payload Examples:** Provide detailed examples of the expected payloads for various API requests and responses. This should include sample JSON structures that illustrate the format and content of the data being exchanged.
- **Payload Samples:** Include actual payload samples for different scenarios to help developers understand the data flow and structure. These samples should cover common use cases and edge cases to ensure comprehensive understanding.

Potential Data Point Options for API Integration

1. **Header Information:**
    1. **Sender/Receiver Details: Specifies the sender and receiver identifier (DUNS, NetworkID or others)**
    2. Document Number: Unique ASN document or reference number
    3. Date/Time of ASN Creation: Timestamp that indicates the ASN's date of generation
2. **Shipment Information:**
    1. Shipment ID: Unique identifier for the shipment
    2. Shipping Date: The actual or expected date of shipment
    3. Carrier information: Details about the carrier responsible for the delivery, such as the carrier's name, method of transport and tracking numbers
    4. ShipFrom: Information about the vendor/supplier origin location
    5. ShipTo: Information about the delivery location (buyer, warehouse, etc)
    6. **Shipping Terms:** Specifies the terms of shipment agreed upon by both parties
3. **Order Information:**
    1. **Order ID:** Unique identifier for each order.
4. **Item Information:**
    1. **Item ID**: Unique part number defined by the supplier.
    2. **Unit of Measure:** The unit in which the items are measured (e.g., pieces, boxes).
    3. **Quantity:** Number of units ordered
    4. **Unit Price:** The price per unit of the item.
    5. **Part Description**: A brief description of the item.

Please note that additional data points can be provided based on customer requirements, provided they are captured and stored in WWTs Oracle System.

Payload Samples

Sample is a generic version of the API transmission.


JSON ASN Sample 2.txt


JSON ASN Sample.txt

Suggested Project Timeline

The suggested development and testing timeline is designed to provide a structured approach to project execution, ensuring that each phase is thoroughly completed before moving on to the next. However, it is important to note that this timeline is flexible and can be adjusted based on customer involvement and evolving project requirements.

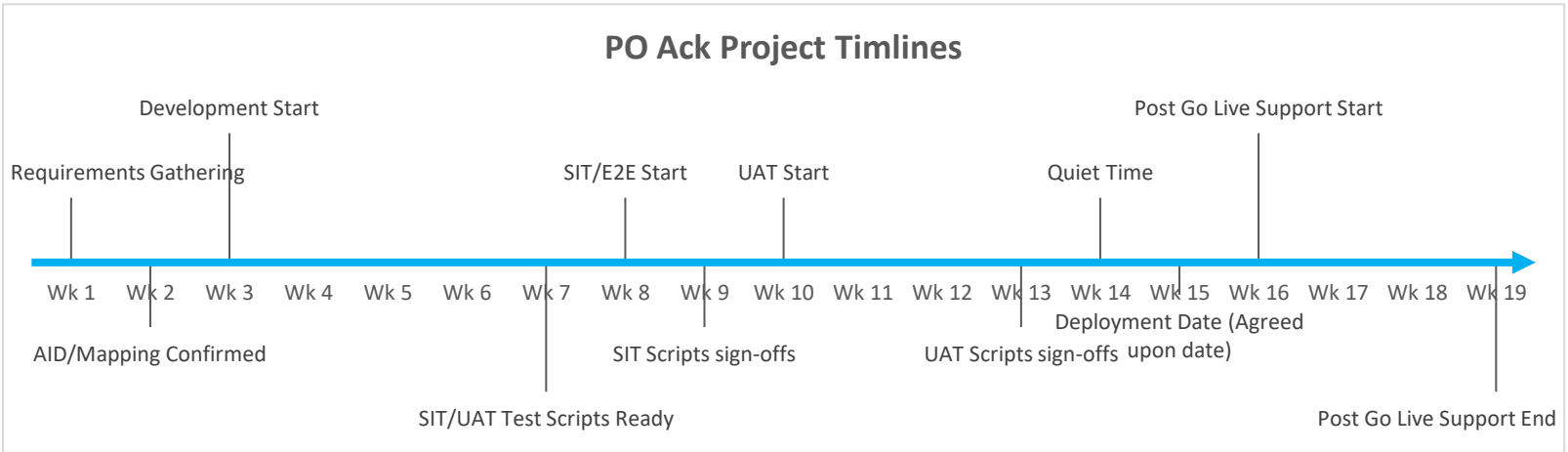
Project Timelines

- **Requirements Gathering:** 2 weeks
- **Development:** 5 weeks
- **Functional Testing:** 2 weeks
- **System Integration Testing (SIT)/End-to-End (E2E):** 2 weeks
- **User Acceptance Testing (UAT):** 4 weeks
- **Quiet Time:** 1 week
- **Deployment Date:** To be determined
- **Post Go Live Support:** 4 weeks

Steps and Deliverables

- **Requirement Gathering:** Analysis and Design (AID)/Mapping
- **Development**
- **SIT:** SIT Scripts sign-offs
- **UAT:** UAT Scripts sign-offs
- **Quiet Time:** Go-live Sign-off
- **Post Go-live:** Retrospective (Retro)

This timeline ensures that all critical phases are covered, but adjustments may be necessary to accommodate the specific needs and feedback of the customer.



Terminological Guide

Definitions can vary by usage. These definitions are sourced from Wikipedia and modified as needed to fit how WWT integrates.

CONNECTIVITY

AS2 – (Applicability Statement 2) is a specification about how to transport data securely and reliably over the Internet. Security is achieved by using digital certificates and encryption. Exchange of certificates will be required in both test and production per WWT. Please note we do not use AS1 or AS3 currently. The partner's AS2ID and URL are required. AS2 is the most common and secured method of delivery that WWT uses and prefers.

BUSINESS TRANSACTIONS

EDI ANSI X12 – (*Electronic Data Interchange Accredited National Standard Institute*) – is a data format and standard created by the Accredited Standards Committee X12. The name "X12" is a sequential designator assigned by ANSI at the time of accreditation. ASC X12's membership includes 3,000 standards experts representing over 600 companies from multiple business domains. This standard is built on the premise of using validation and looping to ease redundancy, size of file content, and minimize the use of proprietary file structures that ultimately saves the government and businesses money in implementation with mapping and transacting business data via mapping and processing time. Each EDI X12 has a 'transaction' indicated by a 3-digit number that represents the type of business use (as seen in the Inbound and Outbound Transactions Section). X12 transactions are the preferred method of EDI usage within WWT.

997 – (*Functional Acknowledgement*) - is an EDI ANSI X12 transaction number that is specifically designed to be a response transaction for acknowledgment purposes. 997s inform the sender on if the original transaction was accepted or rejected based on the validation rules of its standard. WWT prefers to receive 997s for all of its outbound transactions to its partners such that any errors can be corrected and resubmitted in a timely manner for the betterment of both parties and their business.

XML – (*Extensible Markup Language*) - is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. The design goals of XML emphasize simplicity, generality, and usability across the internet and used
for the representation of arbitrary data structures such as those used in web services.

cXML – (*Commerce Extensible Markup Language*) – is based on XML and provides formal XML schemas for standard business transactions, allowing programs to modify and validate documents without prior knowledge of their form. cXML is intended for communication of business documents between procurement applications, e-commerce hubs and suppliers and was created and maintained by Ariba. WWT will use cXML especially if partners or clients partner up through Ariba in order to have a more standardized format for its business

transactions.

JSON – (*JavaScript Object Notation*) - is an open-standard format that uses human-readable text to transmit data objects consisting of attribute–value pairs. It is the most common data format used for asynchronous browser/server communication, largely replacing XML. JSON grew out of a need for a stateful, real-time server-to-browser communication without using browser plugins. The plus side is its flexibility with data and structure for importing. The downside is that there is no standard of which how the data is subscribed. Along with XML, JSON is a popular choice when using web services within WWT.