# Comprehensive Overview
# EDI, XML & REST API

| Overview | EDI | XML | REST API |
|---|---|---|---|
| **Definition** | **Electronic Data Interchange –** standardized format for business documents to be exchanged between parties (ie Trading Partners) | **XML (eXtensible Mark-up Language) –** allows for the creation of documents to provide information with partners. | **Rest API** takes advantage of existing protocols, mainly  HTTP when used for Web APIs. |
| **Keywords** | EDI-X12, Trading Partner (Customer or Vendor), VAN (Value Added Network) | XML, Customer | REST API Customer Order Management |
| **Description** | Batch-based request / response | Real-time request / response | Real-time request / response |
| **Means of Communication** | AS2, VAN, FTP, FTPS, SFTP | HTTP POST, HTML Form POST, SOAP | HTTPS |
| **Offerings** | X12 Standard see "EDI Document Information" below | Order Entry, Order Status, Price and Availability, Item Inquiry | Order Entry, Order Status, Price and Availability, Item Inquiry |
| **Types of Partners** | Customers, Vendors, 3rd Party Providers, Banking, Logistics Providers | Customers, 3rd Party Providers | Customers, 3rd Party Providers |
| **Examples of Third-Party Providers** | SPS Commerce, CommerceHub, OpenText, Hubbub (Loren Data), True Commerce, E2Open, Radial, DSCO | CNET ChannelOnline, QuoteWerks, Quosal, VARStreet, FLASHecom, Inventory Source, Tigerpaw Software, SupplyStream, icecat, ChannelApe, Zomentum, stockinthechannel.com | |
| **Partner Contact for Question/Issue** | EDI@dandh.com | Contact your sales representative | Contact your sales representative |

| Process | EDI | XML | REST API |
|---|---|---|---|
| **General Reference** | www.dandh.com/docs/ | US - www.dandh.com/docs/us/DH-IS-WEB-XML_US.pdf<br>CA - www.dandh.com/docs/ca/DH-IS-WEB-XML_CA.pdf | **US & CA** Access through Gateway Portal apiportal.dandh.com |
| **Supported Transactions** | X12 Standard Documents | US - www.dandh.com/pdfs/DH-XMLProcess-ReferenceTool_US.pdf<br>CA - www.dandh.com/pdfs/DH-XMLProcess-ReferenceTool_CA.pdf | |

# EDI X12 Standard Document Information:

## D&H Standard Integration Scope

Vendor: 850, 855, 856, 810, 867, 846

Customer: 850, 855, 856, 810, 846, 832

| 810 | **Invoice –** Provides information for the billing of goods and services provider, or<br>**Credit Adjustment –** Document that provides a credit adjustment |
|---|---|
| 820 | **Payment Order/Remittance Advice –** Reports payment or remittance details. |
| 824 | **Application Advice –** Provides processing results of transactions within an application system. |
| 832 | **Price/Sales Catalog –** Provides the price of goods or services in the form of a catalog. |
| 846 | **Inventory Inquiry/Advice –** Provides detail on the availability of inventory. |
| 850 | **Purchase Order –** Provides for the placement of purchase orders for goods and services. |
| 852 | **Product Activity Data –** Reports inventory, sales, and other product activity information. |
| 855 | **Purchase Order Acknowledgment –** Provides a seller's acknowledgment of a buyer's purchase order. |
| 856 | **ASN – Advanced Ship Notice –** Provides information relating to a shipment and corresponding order information. |
| 860 | **Purchase Order Change Request –** Provides the information required for a purchase order change. |
| 865 | **Purchase Order Change Acknowledgement –** Provides acknowledgement information for an 860 –<br>Purchase order change request. |
| 864 | **Text Message –** Provide messages and announcements through EDI document automation |
| 867 | **Product Transfer and Resale Report –** Reports information about product sales. |
| 870 | **Order Status Report –** Reports the current status of a customer's order. |
| 997 | **Functional Acknowledgment –** Acknowledges the receipt of each EDI document. |

# Capabilities:

**EDI –** Automates processing and creation of documents from EDI trading partner ERP systems and acceptance by D&H Documents are integrated into most ERP systems to support EDI transactions, providing seamless processing throughout the entire purchasing document lifecycle. Ordering utilizes product numbers defined within partner internal purchasing systems.

Sales, Inventory, and Product Catalog reporting is integrated into trading partner systems, streamlining ordering and related activities. Configurable report schedules ensure information is timely and useful.

**XML/REST API –** Real-time interaction and response from the D&H systems, order request confirmation and queries showing response data from within our system at that point in time are returned within seconds.

Order Entry allows customers to request an order to be created and will be returned an order number if successful, or a failure message detailing why the order was unable to be accepted.

Order Status allows customers to request the status of an order based on Order Number, Invoice Number, or PO Number and will be returned the current status of the order within the D&H processing cycle.

Price and Availability allows customers to request price for item(s), availability for item(s), or both price and availability for item(s) for specific D&H part number(s) and will be returned the requested details for the item(s) submitted. Rest API allows customers to request price for one item only, availability of one item only, or both price and availability for a single item for specific D&H part number and will be returned the requested details for the item submitted.

Item Inquiry allows customers to request price and availability for item(s) specifying D&H or Vendor part number(s), while accepting item quantity to inquire about pricing discounts. Rest API allow customers to price and availability for a single item specifying D&H or Vendor part number, while accepting item quantity to inquire about pricing discounts.

# Onboarding:

**EDI –** Please direct requests to your Sales (Customer) or Purchasing (Vendor) representatives. Once initiated, the D&H Integrations Team assists with the EDI onboarding process.

**XML –** Request for new XML Implementation must be done through D&H website (dandh.com / dandh.ca) via the following steps:
1. D&H Website > My D&H > D&H Automation Services
2. Complete 'Sign Up For D&H Automation Services' Form
   c. Select "XML" on the form
4. Form results reviewed by IT to approve/deny based on pre-determined Sales criteria
5. If approved, a Test Usercode can be setup for testing, or customer may begin transactions with newly setup XML Usercode immediately

**REST APIs –** Request for new REST APIs Implementation must be done through your D&H Representative in conjunction with the following steps:
1. D&H Website > My D&H > contact your D&H Representative for REST API Onboarding

   **Testing Environment**
   1. Complete D&H API Gateway Registration on API Test Portal. Instructions will be emailed to designated recipient identified when contact DH Sales Rep during the API Onboarding Process.
   2. Once registration complete, OAuth testing credentials can be setup for transactions with newly setup REST APIs in the Test environment
   3. Once testing is complete, request Production D&H API Gateway Registration on API Production Portal

   **Production Environment**
   1. Complete D&H API Gateway Registration on API Production Portal. Instructions will be emailed to designated recipient identified when contact DH Sales Rep during the API Onboarding Process.
   2. Once registration complete, OAuth testing credentials can be setup for transactions with newly setup REST APIs in the Production environment

**Web Download –** Create a customizable item file available to be emailed or downloaded from D&H website. Customer may choose specific product categories, attributes, frequency, file type, etc. If not already setup and customer desires to receive web download, they must be an active account and have Net Terms with D&H. Below are the steps to get setup:
1. D&H Website > My D&H > My Downloads
2. Complete the 'Data Disclosure' and return it to your Sales Rep
3. Once informed permitted for Web Downloads, customer may return to My Downloads page and proceed with customizing their item file.

# Change Log:

| Date | Description |
|------|-------------|
| 5/3/2021 | Publish |