

# EVP Core Concepts

This document will cover core areas of EVP Usage. The goal is to provide the background knowledge required to operate EVP as a Power User.

## Channel-Based Architecture (CBA)

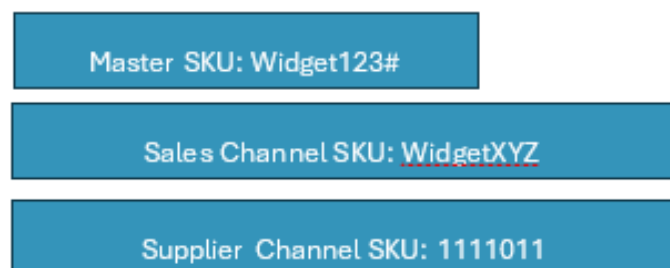
This document section will explain a fundamental principle of EVP's design. EVP is designed to optimize E-commerce operations using a Channel-Based Architecture (CBA). A channel in EVP represents a business function. Examples of Channels include Sales Channels, Supplier Channels, Content Channels, and Financial Channels. All Channels are interconnected via the Etail Channel. The Etail Channel can be understood as the Master Channel.



Representation of EVP's CBA

When creating your Product Catalog in EVP, you will begin with an Etail SKU, also known as the Master SKU. The Master SKU represents your base representation of an item in EVP. Certain details that would be universal across all channels are stored on the Master SKU details page. Examples of Master SKU Details include the UOMs and Dimensions, UPC/MPN/Other Identifiers, Master Title, and Hazardous Product Indicator. **Within an EVP catalog, it is necessary to have a single Master SKU for a product.**

Channel-specific information is stored on a Channel Record, which represents an SKU on an external system. An Item in EVP will have a Master SKU value and various Channel SKU values; when the system communicates with a specific external channel, we will utilize the Channel SKU details that exist under the Master SKU hierarchy.



## Channel Types (CBA-CT)

### Sales channel (CBA-CT-SALC)

A sales channel supports integration with external sales channels, such as marketplaces, websites, and POS, where an independent seller of branded or non-branded products actively sells their Catalog of products. The standard Sales Channel process model supports publishing or linking to a sales channel listing and publishing inventory and price based on the current available inventory, location, and estimated shipping cost. Once an order is placed, it must be fulfilled at the best cost based on the service level associated with the sales order.

### Supplier Channel (CBA-CT-SUPC)

A supplier channel supports integration with suppliers to support warehouse replenishment, sales order-driven cross-docking of pull/flow-based purchase orders, and drop shipping. The Supplier Channel process model supports integration with a supplier to receive various master data forms, including Item catalog details, images, pricing, MAP/UPP, or point-in-time inventory feeds that can be fully updated daily or receive delta changes within the past hour. This supplier data controls what is available for sale on Cross Docking or Drop Ship order fulfillment models, where the items will be ordered on a Purchase Order once sold. The adaptor will also support one or more touch points associated with PO processing, such as sending the PO to the supplier, receiving shipment details back from the supplier, and so on.

### Integration Channel (CBA-CT-INTC)

An integration channel supports event-driven or ad-hoc external system integration that requires calling a specific system to enable the execution of a required process. The most frequent implementation is used for shipment manifesting, rate shopping of a sales order, and generation of carrier package labels.

### Business Channel (CBA-CT-BUSC)

A business system channel supports integration with various business systems, including ERP, POS, CRM, and financial systems. It can support a single transaction, such as feeding fulfilled sales order details to a financial system, or multiple transactions to control the selling of inventory controlled by the business system and coordinate its fulfillment.

### Content Channel (CBA-CT-CONC)

A content channel integrates with a rich source for sold items, such as Enterprise PIM, Etilize, Ingram Book Catalog, Content Café, PDM, etc. Matching the item to this rich content typically uses a standard

such as UPS, EAN, ISBN, MPN, or a distributor’s item number.

### 3PL/WMS Channel (CBA-CT-FULC)

A 3PL/WMS Channel integrates with a subsystem responsible for tracking the bin-level location and quantity of inventory owned by the customer, handling receipts against an inbound order and shipments against an outbound order without creating a purchase order.

### EVP OpenSystems API (CBA-CT-API)

## Business Objects

Within each channel model implementation, a collection of processors enables the sending or receiving business objects that orchestrate the channel-centric business process. These processors perform an Action on a Business Object that is represented as a Verb + Noun combination:

- The **Verb** is the action to be applied to the business object (the **Noun**). Examples of Verbs include Cancel, Add, Process, and Send. Any additional information exclusively related to the action is stored with the Verb.
- The **Noun** is the business object or document that is being acted upon. Examples include Purchase Orders, Sales Orders, and Invoices.

Different types of verbs or actions can be performed on a Purchase Order; as such, the base Noun (e.g., Purchase Order) contains all of the information that might be present on a Purchase Order. The instantiation of each possible verb and noun combination further defines what must be provided to perform the intended transaction. For example, in a **ReceivePurchaseOrder** transaction, business partners and line-item data must be provided; in a **CancelPurchaseOrder** transaction, only the order identifier is required. Many business-level objects can be exposed to the core EVP processes, utilized as needed within the Integration layer.

#### EVP Primary Integration Actions (Verbs)

Initialization Verb	Purpose
Receive	The <b>RECEIVE</b> verb is used to request that the receiving application or business partner process the associated business object. This enables an overall business scenario that may trigger a business-level response to

	<b>ACKNOWLEDGE</b> the business object with either positive or exception details, which could in turn trigger the sending of a <b>CHANGE</b> or <b>CANCEL</b> message.
Change	The <b>CHANGE</b> verb communicates a change in a previously sent <b>PROCESS</b> message.
Cancel	The <b>CANCEL</b> verb communicates a change in a previously sent <b>PROCESS</b> message.
Send	The <b>SEND</b> verb communicates business object details to synchronize two systems.
Get	The <b>GET / SHOW</b> Verb combination is mainly used in API scenarios when data is being requested and then returned.

EVP Primary Business Objects (Nouns)

Business Object	Detailed Description
Item	<p>The <b>Item</b> represents any uniquely purchased part or manufactured product. Item, as used here, refers to the basic information about an item, including its attributes, cost, and locations. It does not include item quantities. Compare this to the noun <b>Inventory</b>, which includes all quantities and other location-specific information.</p> <p>A catalog is a list of items or commodities arranged according to a classification scheme. The Catalog can identify its classification scheme and the classifications and features defined within it.</p>
Inventory	Inventory represents the quantity of an SKU stored at a location. Allocation records control the total inventory exposed to a marketplace (for publishing).

Purchase Order	In EVP, a purchase order represents an order to a third-party inventory owner, typically to fulfill the demand of a Sales Order.
Receipt	The Receipt business object represents a transaction for the receipt of goods or services. It may indicate receipt of goods in conjunction with a purchase order system. The receipt document provides general information about receiving a specific quantity of material goods from a supplier, plus it provides general information about the inventory being delivered, including the requested and actual quantities.
Sales Order	A Sales Order in EVP represents an Order from a Marketplace.
Fulfillment Order	A Fulfillment Order in EVP represents a request to ship items from a third-party inventory holder (3PL) or a WMS. A sales order can have one or more fulfillment orders.
Shipment	<p>A <b>Shipment</b> represents the items placed in a shipping container that a carrier will pick up and move to the requested delivery address.</p> <p>The shipping container can be physical, such as a box or pallet, or logical, such as a portion of a trailer (less-than-truckload, LTL) or an entire trailer (truckload, TL).</p>
Invoice	The <b>Invoice</b> business object invoices a customer for goods/services provided.

Services are storage mechanisms for external connections (FTP, EDI, API). Steps (within a Task) utilize a service to know how to connect to an external system. The external system provides data to be processed by the step or a landing point for data sent by the Step.

# Catalog Management (CATM)

## Item Structure

### Item Details

The Item Details is the header record portion of the EVP Item and will store channel-agnostic details (i.e., Item Type, Unit of Measure (UOM), Quantity, and Dimensions), UPC/EAN/ISBN, Manufacturer (MFR), Model Part Number (MPN), and Title.

The item detail uses a Master SKU (also referred to as the Etail SKU) as the primary EVP SKU. All Channel SKUs for an item will be tied back to the Master SKU.

### Channel Listing Details

The sub-structure of the Master Item is a collection of associated channel records by type. Each record has a Channel SKU that refers to an item's SKU value on a specific channel. When communicating with an external Channel, the Channel SKU value is used.

The secondary channel types of content, business system, and 3PL-WMS are displayed under the Supplier or Integration channel types.

### Attributes

Attributes are channel-specific values stored on a Channel record. Attributes store data such as Marketplace Title, Description, and other SKU descriptors. Attributes can also store information related to **Order Action Rules** and **Selection Criteria in business functions**.

## Channel Taxonomies (CATM-CTAX)

The EVP Data Dictionary is based on a taxonomy-driven channel data model. The attributes we can associate with a channel listing are not limited. This XML definition of a channel structure enables the definition of attributes, including attribute types and validation criteria.

Taxonomies are data structures that store Product Type, Category, and Attribute information for a specific channel. Marketplaces will provide the taxonomies to which they must adhere. Each Channel within EVP is assigned a Taxonomy. This controls what product type, category, and attribute data can be stored on the SKU's channel record.

## **Category / Product Type (CATM-CPTY)**

Every taxonomy can have a category and an associated product type tree; these data structures are most common within a sales channel. An item is associated with a single category that controls where it will be sold within the sales channel and which attributes can be set for it. The Product Type has more limited use and typically controls the commission percentage associated with selling the product on a marketplace.

## **Category Mapping (CATM-CMAP)**

It is possible to map a category from one channel to another to simplify catalog maintenance. The best practice is to choose a master channel, typically Amazon or a Content channel, and then map it to the e-tail channel. Then, map the e-tail channel to one or more other sales channels, such as eBay and Walmart.

## **Attribute Mapping (CATM-AMAP)**

The best practice is to map from the Supplier/Sales channel to the Etail channel and then to the next channel. Since multiple channels can have the same attribute, the mapping allows you to control which channels are considered and in what sequence. So, if the eBay listing needs a Bullet Point to associate with the listing, but no attribute of this name is defined, EVP will look at the PIM channel, the website sales channel, Walmart, and then Amazon. The first channel with this attribute will be used.

## **Item Types (CATM-IT)**

Selling a master item at each level on every sales channel is often a brand-centric approach. Still, resellers and even brands want to support creative ways of selling these products or handle challenges in item versioning. To support these value-added scenarios, the EVP solution offers several capabilities that enable the combination of base items into different sales-level combinations with minimal impact on the fulfillment process.

### **Item (CATM-IT-ITEM)**

This Item Type represents items that will be purchased or stocked and can serve as a building block for 'Pack of n' or a combination of items defined in a different item master sales configuration, such as a kit.

Suppose the master item is stocked at each level but is sold on multiple sales listings as "Each", "Pack\_2", and "Pack\_4". Available inventory will be published in multiples of the Pack Qty. For example, if a base item has 3 in stock, it will be published as 3 in the Each listing, 1 in the Pack\_2 listing, and 0 in the Pack\_4 listing. When an order is received for a Pack\_2, the sales quantity will be one, but it will be handled as 2 x Each for order fulfillment.

### **Service (CATM-IT-SERV)**



This Item Type represents an item that defines a service to be performed on the order, i.e., by a kit of wheels and tires, plus the service item to mount the tires onto the wheels. This item type has no associated inventory; however, a user must confirm that the service was performed before the order is marked as fulfilled.

## **NON-STOCK (CATM-IT-NONS)**

This Item Type represents a digital item that is not stocked and requires no additional services to be performed on an order. It is typically used to process orders that include digital gift cards, round-up donations, or state-level tire fees that must be paid when purchasing new tires. When this type of item is present on an order, it will be immediately marked fulfilled. If it is the only item on the sales order, the sales order will be marked fulfilled.

## **Kit (CATM-IT-KIT)**

A kit is a virtual combination of items for which EVP will publish an inventory quantity based on the availability of the master items that comprise the kit; i.e., a partial kit cannot be sold. The kit will have a sales listing on the relevant sales channel, and the price will be based on the combination of master items in its Bill of Materials (BOM). When an order is received for one kit, the sales qty will be one. Still, the EVP order line details will be broken down into the master items that make up the kit. For example, if the kit comprises Item IAI x 3 and IBI x 2, there will be two order lines: one for 3 of IAI and one for 2 of IBI. EVP will handle selling the same master item as a kit and on their own sales listings, where it can be sold at the 'Each' and 'Pack of n' level.

## **Assembly (CATM-IT-ASSY)**

An assembly needs a value-added step to create it and convert the master items into an assembly item in stock before it is published as a sellable quantity. Like a kit, an assembly will have a Bill of Materials that defines what combination of items is consumed from stock when an assembly is created.

## **Virtual Item (CATM-IT-VIRI)**

A Virtual item allows you to indicate that a single sales item could be fulfilled from one or more master items; can be assigned a relative priority to control the order in which inventory is checked for fulfillment, plus a qty at the item version level to allow you to adjust the qty of what is shipped, i.e. the sales listing is for one pack of 2 item that is stocked as a pre-assembled pack of 2. Still, if the assembly is out of stock, the system selects each item and ships x 2.

## **Item Weight and Dimension Priority Control (CATM-IWDPC)**



Using Item Weight and Dimension priority control, similar to attribute mapping, it is possible to control which channels are considered when looking up item UOM details, i.e., look up values on the WMS channel, then the supplier channel, and then the sale channels.

## **Selection Criteria (CATM-SELC)**

The selection criteria option is one of EVP's most powerful configuration tools. It is exposed in many different features, allowing an almost unlimited set of permutations to be configured. Multiple selection criteria can be defined within a single rule, combined as 'Selection 1' AND 'Selection 2' is True; the item will be selected. If multiple filter rules are defined, the item is selected, and each rule is evaluated as 'Rule 1' or 'Rule 2' being true.

The selection criteria is a logic statement that selects the listings that meet the criteria.

## **Item Sets (CATM-ISET)**

An Item Set is a mechanism for controlling which items are considered by an automation processor step using a Selection Criteria.

## **Dynamic Restrictions (CATM-DYRT)**

The dynamic restrictions capability within EVP enables you to define selection criteria filters that prevent sales listings from being created by a user or an automated process. In this example, a reseller does not want to sell any items that weigh more than 70 pounds, i.e., they cannot be shipped by parcel carrier.

## **Catalog Sources (CATM-CATS)**

Catalog Sources are EVPs' primary import mechanism for flat files from an external source. The Catalog Source framework lets item, price, and inventory level data be loaded through a flexible, screen-based mapping tool. It supports:

- Loading data into temporary transfer tables
- Validate data against format and business rules
- Apply mapping and validations
- Upload the records created based on these checks into the operational tables.

## **Item Creator STEP (CATM-ICRE)**

An Item Creator processor step is one of two primary methods to create a Channel's Catalog in EVP (the other being a Catalog Source import). Item Creators are configured to look at a Reference Channel. If the listing exists on the reference channel, it is created on the Channel where the Item Creator runs.

# Order Management System (OMS)

## Distributed Inventory Management (DIM)

The process and activities associated with allocating inventory to multiple sales channels from various source locations.

### Contacts (OMS-DIM-CONT)

A Contact allows you to organize a combination of roles of individuals or departments associated with a channel. The most important aspect of contact is their role, but more importantly, their address, which allows the EVP solution to build a Geolocation model of all the nodes in the inventory network.

A single contact can be associated with multiple roles on the channel; for example, John Smith at 123 A Street, Ashland, OR 53123 is the ‘Ship To’ contact at a specific location on the channel. John could also be the ‘Ship From’, ‘Return To’, or ‘Billing Contact’; or Jane Doe could be the ‘Ship From’ contact.

### Channel Locations (OMS-DIM-LOCN)

The core foundation of the Distributed Inventory Engine is a channel with one or more locations that can support inventory processing via one or more order fulfillment methods. An inventory source channel could be an Etail stock location, a Supplier warehouse location, a 3PL warehouse location, or, on occasion, a Business System location.

Each location can track inventory and control the processes that can be performed there. For example, it can track supplier inventory in its network and allow a Purchase Order to be sent to its warehouse for delivery to your warehouse. Alternatively, a location could track the inventory that you own and control which sales channels it is allocated to, which carriers can be used to ship sales orders to your customers, which package types are available at that location, and so on.

Locations have Tiers and Priorities, which impact DOM (Distributed Order Management) decisions. First, all locations are grouped into Tiers (Tier 1, 2, 3, etc.); lower-numbered Tiers are prioritized first. Then, Priority is assessed; higher-numbered Priorities are utilized first. Finally, the Selection Order configuration is considered. Selection Order options include Cost, Latency, Priority, Distance, and Banded Latency.

### Sales Allocation Records (DIM-SALA)

The Location Allocation Record is used to determine whether the inventory in a location should be considered when publishing or fulfilling a sales quantity to a specific sales channel and to identify the safety stock that should be taken into account.

## Purchase Order Management (POM)

## **Suppliers (OMS-POM-SUPL)**

A supplier represents the source of inventory for specific items and needs to be set up before required supplier listings can be created and then associated with a purchase order or fulfillment order. A supplier needs to have at least one location.

## **Purchase Orders (OMS-POM-PO)**

A purchase order (PO) is a commercial document that serves as the first official offer issued by a buyer to a seller. It specifies the types, quantities, and agreed-upon prices for products or services. It is used to control the purchase of products and services from external suppliers.

## **Fulfillment order (OMS-POM-FO)**

A fulfillment order (FO) is similar in structure and purpose. Still, it is used to request the shipment of your inventory to fulfill a sales order demand or a work order, transferring inventory from one warehouse to another.

## **Inbound Shipments (OMS-POM-IS)**

When a Purchase Order is sent to a supplier, it could reflect items expected to arrive tomorrow, this week, or at a future date across multiple deliveries. The purpose of an Inbound Shipment is to define how a supplier sends inventory to your warehouse for one or more purchase orders that may be split across multiple supplier locations, but represent the contents of a physical shipment expected to arrive at a warehouse.

## **Inventory Control (OMS-INVC)**

The process and activities associated with inventory control, which is the process of managing stock once it arrives at a warehouse, store, or other storage location, including inventory balance, cycle count adjustments, or storage location transfers

## **Carrier Routing Guide (OMS-CRG)**

The process and activities associated with managing channel shipping levels, converting to carrier SCAC, and Setting Service levels using shipping cost models, package types, routing guides, address validation, and rate shopping. Additionally, an optional manifesting step is available to create carrier labels.

EVP must translate carrier service level input from a marketplace into data structures that a fulfillment system can understand. Additionally, when a fulfillment system returns tracking information, EVP must translate the carrier's service level from the tracking data into a format that the Marketplace can understand.

## **Channel Shipping Level (OMS-CRG-CHSL)**

The channel service level is used to define the level of service expected. On a sales channel, it is typically a name with no context to the carrier that will perform the shipment, just the expectation on how long it will take, i.e., Next Day, Second Day, Standard, etc. For a fulfillment or supplier channel, it is a name that will allow them to know what carrier they are expected to use (FedEx Home Delivery, USPS Priority Mail, etc.), or a generic name if they are going to select the carrier (Next Day, Second Day, etc.)

## **Carrier Service Level (OMS-CRG-CASL)**

Carrier Service Levels represent specific delivery services (FedEx Ground, UPS Overnight, etc.) used when requesting a shipment's manifesting and will be selected based on mapping rules to the sales channel and carrier rate shopping that will select the lowest cost or preferred option.

## **Channel Service Level Mapping (OMS-CRG-CSLM)**

Channel Service Level mapping is a multi-dimensional mapping tool that supports the setup of an almost unlimited set of shipping and rate shopping scenarios.

## **Shipping Policies (OMS-CRG-SHPP)**

Shipping Policies enable you to group items with similar characteristics and/or locations, and control how they are sold on a sales channel that supports multi-location inventory or different shipping prices per item. An example of this is any item under 70 LBS is sold with free shipping, but if it's over, then it's a flat rate of \$70; or if an item is located within these states clustered around your warehouse, then it will be offered 1-day free shipping, otherwise it will be 2 days.

## **Package Types (OMS-CRG-pKTY)**

Package Types within EVP represent the shipping boxes, totes, pallets, coolers, and other containers that can be used when packing an order and shipping it to the customer. Each Package Type defines the outer and inner dimensions of the package, as well as any rules that govern its use and any dynamic content in the package details, such as the quantity of kraft paper or dry ice required when shipping to a customer in 1 day versus 2 days.

## **Cartonization (OMS-CRG-CART)**

Cartonization is selecting all the items associated with a sales order and creating the optimal combination of packages to achieve the lowest shipping cost. The simplest result is that the entire order is packed into a single package, but the result could also be one large cooler box for frozen items, along with one large and one medium corrugated box for dry products.

## **Carrier Rate Shopping (OMS-CRG-CRS)**

Carrier Rate Shopping is the preferred method within EVP for estimating the cost of shipping an item or sales order. The calculation results are used as inputs to pricing calculations and fulfillment decisions. It involves calling one or more carriers to obtain a carrier and service level combination that can achieve the required transit time performance. The results will include the \$ and transit days for each option returned.

## **Shipping Cost Models (OMS-CRG-SCM)**

Shipping Cost Models are used in EVP to estimate the cost of shipping an item or sales order. The calculation results serve as inputs to pricing calculations and fulfillment decisions. A Shipping Cost Model mimics a carrier contract structure but is not as accurate as a Carrier Rate Shop and does not include transit time.

## **Distributed Order Management (OMS-DOM)**

The process and activities associated with sourcing a sales channel order via one or more order fulfillment models.

DOM refers to the actions taken by the EVP when attempting to find Inventory to fulfill a Sales Order. EVP reviews all potential solution options based on the system configuration and selects the best one. The system configuration and available QTY impact the decision.

## **Address Validation (oms-dom-addv)**

Shipping address validation is the process of verifying whether a customer's provided shipping address is accurate and exists by checking it against a database of known addresses, usually through a postal service like USPS. It ensures that a package can be successfully delivered to the intended location; it essentially means confirming that the address is real and properly formatted.

## **Order Action Rules (oms-dom-OAR)**

Order Action Rules (OAR) enable automated behavior when an order is imported. Various aspects of an order are evaluated. If they meet the OAR's Selection Criteria, those OAR actions are applied. The rules can be evaluated as pre- or post-fulfillment decisions.

## **Order Fulfillment Decision (oms-dom-OFD)**

Once a sales order is loaded that can be released to order processing, the 'Initial Order Fulfillment Decision' function is called to select the best 'Landed Cost' fulfillment decision based on the Ship-To Address on the Sales Order. This decision will be considered as follows:

- Geolocated Order Fulfillment Location Model

- Shipping Service Levels
- Shipping Cost
- Required Transit time

## **Order Fulfillment Management (OMS-OFM)**

The process and activities associated with fulfilling orders via EVP or external suppliers, 3PLs, or other customer systems.

### **Pick, Pack, and Ship (OMS-OFM-PPS)**

The ‘Pick, Pack, and Ship’ order fulfillment method processes sales orders using inventory that you already own. The inventory is stored in an EVP-managed location that does not require integration with an external system. When processing these orders, EVP can generate a bulk pick list, a packing slip, and/or a carrier shipping label.

### **Cross Docking (OMS-OFM-CD)**

The ‘Cross Docking’ order fulfillment method purchases items from a supplier when sold on a sales order. Multiple sales orders can be linked to a cross-dock purchase order to minimize the inbound shipping cost on a supplier purchase order. When the inventory is received on the purchase order at the warehouse, the linkage to the sale order generates the required packing slip and carrier label so the items can be shipped immediately without being put away into a storage location.

### **Drop Shipping (OMS-OFM-DS)**

The ‘Drop Shipping’ order fulfillment method requests a drop ship supplier, via a purchase order, to fulfill the order on your behalf. Therefore, you never have to touch the inventory physically, and when shipment confirmation is received, the purchase order and sales order are updated as needed. Optionally, it is possible to create sales channel-specific packing slips and carrier labels for a drop-ship purchase order and send them to the supplier, or they can use a web screen to create as needed.

### **3PL/WMS Fulfillment (OMS-OFM-3PLWMS)**

The ‘3PL/WMS Fulfillment’ order fulfillment method is used to process sales orders using your own inventory. It is stored in an EVP-managed location that requires integration with an external system. Once the 3PL/WMS system updates this fulfillment order, the sales order will be updated, and shipment details will be communicated to the sales channel. Optionally, it is possible to create sales channel-specific packing slips and carrier labels for a fulfillment order and send it to 3PL/WMS, or they can use a web screen to create as needed.



## **Sales Channel Fulfillment (Amazon FBA, Walmart WFS, etc.) (OMS-OFM-SACF)**

The ‘Sales Channel Fulfillment’ order fulfillment method processes sales orders using inventory you already own and stores at a warehouse associated with a sales channel (Amazon or Walmart). These orders are fulfilled without processing requests from EVP and are only tracked for revenue reporting and inventory consumption purposes.

## **Packing Lists (OMS-OFM-PACL)**

A packing slip summarizes the items associated with a sales order being shipped at the order or package level.

## **Manifesting Engine (OMS-OFM-MANE)**

A manifesting engine within EVP is responsible for establishing a connection to one or more carrier accounts, which will be utilized when performing a rate shopping request or generating a carrier-compliant label.

## **Carrier Label (OMS-OFM-CARL)**

A parcel carrier compliant label generated by the manifesting engine using your or a third party's shipping account. These labels will include details on the tracking number assigned by the carrier, the carrier and service level, and several configurable reference fields.

## **Returns Management (OMS-rmgt)**

Returns Management, in the context of companies and resellers, refers to managing the return of products from customers to the business. It encompasses product returns, exchanges, reselling, and disposal. Efficient returns processing ensures products are returned, restocked, or disposed of in a cost-effective, friendly manner, improving customer satisfaction and minimizing information loss.

## **EVP System Management (ESM)**

### **User Interface (ESM-UI)**

#### **Desktop UI (ESM-UI-DT)**

The EVP application has a Desktop GUI client typically used for application configuration or Power User production research. It is accessed via a Microsoft Remote Desktop Protocol (RDP) connection.

#### **Web UI (ESM-UI-WB)**



The EVP application has a Web UI primarily used for day-to-day activities performed by various users.

## **Process Automation Using Tasks and Steps (ESM-PROcA)**

EVP operates system functions with Tasks. Examples of system functions include:

- Importing Orders from Marketplaces
- Uploading Tracking to marketplaces
- Importing Inventory from Suppliers/ERPs/WMSs
- Pricing Items
- Creating Channel SKUs in EVP
- Publishing Data to a Marketplace (QTY, Price, Attributes)

Steps are within a Task. A Task can be a single step or a series of steps, and steps represent an individual function.

## **System and Process Monitoring (ESM-MON)**

The process and activities associated with monitoring business processes and application processors within EVP and creating issues when exceptions are detected.

## **Issue Management (ESM-IMGT)**

During the execution of processors or process monitoring, an issue can be created to highlight a data quality issue, a processor exception, the non-occurrence of an event, etc. An issue can be communicated to an email group to trigger follow-up as needed; other issues will self-correct once the root cause has been addressed, i.e., an unknown item exception in the sales order will be closed when a sales listing is added to the catalog and the processor loads the order on its next run.

## **Analytics & Data (ESM-ANDA)**

The processes and activities are associated with utilizing the extensive information created by executing EVP processes. The EVP solution is a data-driven application that leverages core datasets to enable its operational processes. Based on the execution of these processes, it generates an extensive set of data that can be used for many different purposes. Therefore, the EVP solution provides several options to access and leverage this data for process execution, operational improvement initiatives, or business KPIs.

## **Order Monitors (ESM-ANDA-ORDM)**

The Order Monitor provides access to specialized views to track sales order velocity, displayed daily or hourly by revenue or order count.

## **Data Sources (ESM-ANDA-DATS)**

Data Sources provides an alternative method of accessing EVP data through views, SQL statements, or stored procedures, which can add business structure or isolate specific datasets using reports and dashboards. These data sources can also be scheduled to run at specific times and extract data into files for external analysis and review. At a technical level, data sources provide fast-lane access to data that bypasses the application and UI layers so reduces operational system load while isolating the complexity of EVP's operational data structures, which are structured for performance versus ease of business reporting, i.e., item attributes are all stored in a single attribute table with a channel cross-reference, so a database view can be used to filter to show Sale Channel or specific suppliers set of attributes.

## **Data Warehouse (ESM-ANDA-DATW)**

The Data Warehouse provides access to data in a manner that does not impact the system's operational processing. A data warehouse table is maintained to provide normalized, single-table access to key data elements. The primary use of this model is for the Sales Order-related information. This data warehouse table approach also supports tracking data, increasing the order processing quality. However, operational data is only stored once; for example, Shipping cost is first estimated, then updated to the as-manifested value, and then optionally when the carrier invoice is processed. These data elements have their lifecycle status of Initial, Estimated, and Confirmed

## **Dashboards (ESM-ANDA-DASH)**

Dashboards allow user interaction with data via summary gauges that drill down into different slices and layers of data. They can utilize the data warehouse table or other data sources as their primary data source.

## **Reports (ESM-ANDA-RPT)**

Reports enable data to be organized into various formats, including forms, labels, and tabular reports. They can use the data warehouse table, data sources, or operational data as their data source. Certain reports have access to data wrappers that programmatically pass a report, a structured data set, e.g., Sales Order details for a packing list, Inbound Shipment Details for shipment documentation, etc.

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