

AssetOptics for Salesforce Field Service Key Features Reference Guide Last Updated: July 21, 2021

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Overview

AssetOptics for Salesforce Field Service is a managed package with a namespace prefix of AOFSL. AssetOptics has dependencies to the objects enabled with a Salesforce Field Service Standard permission set license, it is not dependent on the Field Service managed package with the FSL namespace. AssetOptics provides the best of breed MRO Inventory Management & Purchasing capabilities contained in the AssetOptics; Facilities, Equipment and Maintenance for Salesforce OEM native Force.com maintenance management solution. The AOFSL managed package excludes the redundant objects found in our OEM package in favor of the standard objects found in Salesforce Service Cloud and the objects enabled with a Salesforce Field Service Standard permission set license.

Key Features

Asset Management

Capture Asset Attributes using noun-modifier attribute pairs.

Nouns, Modifiers and Attributes enable a user to create, through data records in lieu of custom fields, attribute definitions and values that can be tracked on Assets and similarly on Products. Nouns, Modifiers and Attributes are three objects in successive Master-Detail relationship. Once a Noun-Modifier pair is assigned to an Asset, a unique list of Asset Attributes is populated. A user subsequently enters Attribute Values.

Figure 1 – Asset with Noun, Modifier and Asset Attributes complete with Attribute Values.

The screenshot displays the 'Asset' record for 'Air Compressor Motor #23'. The interface includes a header with 'Delete', 'Clone', and 'Edit' buttons. Below the header, there are tabs for 'Details' and 'Related'. The 'Details' tab is active, showing a table of asset information. To the right, there is a 'Related List Quick Links' section with links to 'Child Assets (0)', 'Work Orders (0)', 'Cases (0)', 'Consumed Products History (1)', 'Maintenance Plans (0)', 'Work Order Line Items (0)', and 'Asset Attributes (7)'. Below this is the 'Asset Attributes' section, which is a Lightning Web Component (LWC) displaying a table of attribute values.

Asset		Air Compressor Motor #23		Delete Clone Edit																					
Account		Contact		Quantity																					
Plant 1																									
Details Related <table> <tr> <td>Asset Name</td> <td>Air Compressor Motor #23</td> <td>Status</td> <td>Stock Inventory</td> </tr> <tr> <td>Product</td> <td>Air Compressor Motor</td> <td>Account</td> <td>Plant 1</td> </tr> <tr> <td>Serial Number</td> <td>04.16.21.A</td> <td>Contact</td> <td></td> </tr> <tr> <td>Install Date</td> <td></td> <td>Competitor Asset</td> <td>☐</td> </tr> <tr> <td>Transfer Order Line</td> <td></td> <td>Usage End Date</td> <td></td> </tr> </table>						Asset Name	Air Compressor Motor #23	Status	Stock Inventory	Product	Air Compressor Motor	Account	Plant 1	Serial Number	04.16.21.A	Contact		Install Date		Competitor Asset	☐	Transfer Order Line		Usage End Date	
Asset Name	Air Compressor Motor #23	Status	Stock Inventory																						
Product	Air Compressor Motor	Account	Plant 1																						
Serial Number	04.16.21.A	Contact																							
Install Date		Competitor Asset	☐																						
Transfer Order Line		Usage End Date																							
Service Details <table> <tr> <td>Asset Serviced By</td> <td></td> <td>Asset Provided By</td> <td></td> </tr> </table>						Asset Serviced By		Asset Provided By																	
Asset Serviced By		Asset Provided By																							
Asset Attribute Definition <table> <tr> <td>Noun</td> <td>AC Motors</td> </tr> <tr> <td>Modifier</td> <td>General Purpose AC Motors</td> </tr> </table>						Noun	AC Motors	Modifier	General Purpose AC Motors																
Noun	AC Motors																								
Modifier	General Purpose AC Motors																								
General Ledger Account Details <table> <tr> <td>Expense GL Account</td> <td></td> <td>GL Variable 1</td> <td></td> </tr> <tr> <td></td> <td></td> <td>GL Variable 2</td> <td></td> </tr> </table>						Expense GL Account		GL Variable 1				GL Variable 2													
Expense GL Account		GL Variable 1																							
		GL Variable 2																							

Related List Quick Links	
Child Assets (0)	Maintenance Plans (0)
Work Orders (0)	Work Order Line Items (0)
Cases (0)	Asset Attributes (7)
Consumed Products History (1)	

Asset Attributes	
Attribute Name	Attribute Value
1 Horsepower	3
2 Voltage	480
3 RPM	1850
4 Frame Size	238T
5 Motor Shaft Rotation	CW
6 Service Factor	1.1
7 Phase	3

There is a Lightning Web Component (LWC) displayed on the Asset record page which presents the Asset Attributes. The Attribute Values can be edited from the Related List or directly in the LWC. Changes to the Attributes in the Noun-Modifier setup are propagated to each corresponding Asset Attribute. Thus if you add a new Attribute or edit the Name or Sort Order on existing Attributes, these changes are automatically updated for each corresponding Asset Attribute.

Record an Expense GL Account and up to four GL Variables for inventory accounting.

Cost accounting features are provided to track all general ledger transactions associated with the procurement, storage, and consumption of spare parts and supplies. An Asset can have a designated expense type General Ledger Account specified as well as up to four (4) General Ledger Variables. This structure is consistent with native Force.com accounting solutions such as Financial Force and Accounting Seed. These GL Variables are typically used to define subledger account values such as Company, Cost Center, Project, etc. When a Work Order is created for an Asset, the Work Order trigger handler copies the Expense Account and G/L Variables from the Asset for further use when a Product Item is consumed to the Work Order.

Figure 2 – Asset with Expense GL Account and GL Variables.

Asset
Air Compressor Motor #23

Account

Contact

Quantity

[Plant 1](#)

Details	Related
Asset Name	Air Compressor Motor #23
Product	Air Compressor Motor
Serial Number	04.16.21.A
Install Date	
Transfer Order Line ¹	
Status	Stock Inventory
Account	Plant 1
Contact	
Competitor Asset	☒
Usage End Date	
Service Details	
Asset Served By	Asset Provided By
Asset Attribute Definition	
Noun ¹	AC Motors
Modifier ¹	General Purpose AC Motors
General Ledger Account Details	
Expense GL Account ¹	Electrical Motor Repair Expenses
GL Variable 1 ¹	Company 1
GL Variable 2 ¹	Cost Center A
GL Variable 3 ¹	
GL Variable 4 ¹	

Automatically create Assets representing serialized Product inventory.

Product Item inventory can be in the form of bulk stock or serialized. Bulk stock inventory is used when no one unit is different from another. Serialized inventory is used when an instance of a Product Item is unique and is typically tracked with a serial number or other identifier. When a serialized Product Item is received on a Purchase Order and thus added as Quantity On Hand, a serial number is entered for each specific unit. An Asset record is automatically created and placed into the receiving inventory bin location. The Asset Name will be either the related Product Name or the user entered serial number, based on a parameter defined in a custom setting. If the related Product has a Noun-Modifier assigned, then the Asset will inherit the Noun-Modifier values and any Product Attributes and Attribute Values will be copied to the Asset Attributes.

Figure 3 – Bin Location for Product Item showing 3 serialized Assets

Bin Location 1-A-1-A					
Row	Section	Level	Bin	Product Name	Product Item
1	A	1	A	P670 Laser Controller	PI-0934

Serialized Assets (3)			
Asset Name	Serial Number	Install Date	Account Name
P670 Laser Controller	04.10.21.B		Customer 1
P670 Laser Controller	P670 Laser Controller - A		Plant 1
P670 Laser Controller	P670 Laser Controller - B		Plant 1
View All			

Maintain a history of all Products Consumed to an Asset

When a Product (Item) is consumed to a Work Order with an Asset, a record of all unique Products ever consumed against the Asset is recorded.

Figure 4 – Consumed Product History displayed as a related list on the Asset record page.

Consumed Products History (2)			
APCH ID	Product	Quantity On Hand	Quantity Unit of Measure
APCH-000315	FLTR-20x20	2.00	EA - Each
APCH-000314	1/4-20 Hex Head Cap Screw, 1" Length	224.00	EA - Each
View All			

Products

Capture Product specifications using noun-modifier attribute pairs.

Nouns, Modifiers and Attributes enable a user to create, through data records and not custom field setup, attribute definitions and values that can tracked on Products and similarly on Assets. Nouns, Modifiers and Attributes are three objects in successive Master-Detail relationship. Once a Noun-Modifier pair is assigned to a Product, a unique list of Product Attributes is populated, and the user enters Attribute Values.

Generate extended Product Description from Noun-Modifier Attributes and Values.

The Attribute Description text field is automatically generated using the Modifier, Noun, Attribute Value – Attribute. This provides a standardized description of a Product and facilitates searching and identification of Product records.

Manage Quantity On-Hand at the Product and Product Item level.

The Quantity On Hand of a Product is automatically populated based on the sum the Quantity On Hand for all the related Product Items.

Automatically Derive Unit Value of a Product.

The Unit Value for a Product is automatically calculated using the weighted average Unit Value for all Product Items. The Product Unit Value is used to calculate Planned Product Costs on Work Types, Work Orders and Work Order Line Items. Planned Product Costs can be compared to Actual Product Cost after Products Items are consumed on Work Orders and Work Order Lines.

Specify Discrete Quantities (integer values) for inventory management processes.

A Boolean attribute labeled **Discrete Quantities** is provided on a Product. When this value is True, all subsequent Quantity values for all related Product Items are enforced as integer values. This ensures the user cannot consume a partial quantity of a whole item, i.e., you cannot consume 0.5 of a 5VX-750 belt as displayed in Figure 5 below.

Figure 5 – Product with Noun, Modifier & Attribute Values, Quantity On Hand, Unit Value, and Discrete Quantities Boolean value.


Product
5VX-750 Belt

[Edit](#)
[Delete](#)
[New Product Item](#)

Noun
[V-Belts](#)

Modifier
[Cogged](#)

Quantity On Hand
12.00

Quantity Unit Of Measure
EA - Each

Unit Value
\$73.05

Details
Related

Product Name
5VX-750 Belt

Active
☐

Product Description
5VX-750 Belt

Product Family

Attribute Description ⓘ
Cogged V-Belts: Cogged V-Belt - Type, 5VX - Section, 5VX750 - Industry Number, 1 - Number of Ribs, 75" - Length, 5/8" - Top Width, 17/32" - Thickness, Fabric Cover, Polyester Cords, Rubber Body - Material

Other

Display URL

Product Code

External Data Source
5VX-750 Belt

Product SKU

External ID

Noun ⓘ
[V-Belts](#)

Modifier ⓘ
[Cogged](#)

Inventory Details

Quantity On Hand ⓘ
12.00

Unit Value ⓘ
\$73.05

Quantity Unit Of Measure
EA - Each

Auto Update Unit Value ⓘ
☒

Discrete Quantities ⓘ
☒

Created By
 Mike Edwards, 2/23/2021 12:11 PM

Last Modified By
 Mike Edwards, 5/13/2021 11:37 AM

Quick Links

Related List Quick Links ⓘ

[Product Items \(3\)](#)

[Product Attributes \(8\)](#)

[Assets Where Consumed History \(1\)](#)

[Assets \(0\)](#)


Product Attributes

	Attribute Name	Attribute Value
1	Type	Cogged V-Belt
2	Section	5VX
3	Industry Number	5VX750
4	Number of Ribs	1
5	Length	75"
6	Top Width	5/8"
7	Thickness	17/32"
8	Material	Fabric Cover, Polyester Cor...

Product Items

Manage Quantity On Hand in multiple Bin Locations within an inventory Location

The Location on a Product Item is used to represent the warehouse, storeroom, or mobile storage unit (vehicle) where the Product is stored. Within a warehouse, a Product is typically located in multiple “bins”, i.e., Row, Section, Shelf. Bin Locations are used to identify *where* within the warehouse an item is stored. Many Bin Locations can be defined for a single Product Item and the Quantity On Hand can be managed within a specific Bin Location.

Figure 6 – Bin Locations displayed as a related list on the Product Item record page.

Product Item PI-1399			
Bin Locations (2)			
2 items • Sorted by Bin Loc ID • Updated a few seconds ago			
Bin Loc ID ↑	Quantity On Hand	Primary Bin	
1 1-A-1-A	179.00	☒	▼
2 3-C-1-A	40.00	☐	▼
View All			

Reserve inventory based on open Product Requests, Need by Date, and Lead Time

The Product Item object has been extended beyond Quantity On Hand to include Quantity Reserved and Quantity Available. When a Product Request is created and the inventory Location is specified, a reservation is recorded to the corresponding Product Item. The reservation is time sensitive and is based on the Need by Date specified on the Product Request minus the Lead Time on the Product Item. The Quantity Available is the Quantity On Hand minus the Quantity Reserved. Quantity Available represents unallocated or “free stock” inventory.

Figure 7 – Product Item with Quantity Reserved, Quantity Available and Lead Time.

Details

Related

Inventory Locations

Open Product Requests

Open Purchase Orders

Open Transfer Orders

Information

Product Item Number

PI-1399

Product Name

1/4-20 Hex Head Cap Screw, 1" Length

Description ⓘ

1/4-20 Hex Head Cap Screw, 3/4" Length Box of 10 EA

Location

Florida Warehouse

Owner

Mike Edwards

Status

Active

Noun

Cap Screw

Modifier

Hex Head

Search

pi

Stocking Details

Quantity On Hand

219.00

Quantity Reserved

6.00

Quantity Available

213.00

Quantity Unit Of Measure

EA - Each

Primary Bin Location

1-A-1-A

Primary Bin Quantity On Hand

179.00

Minimum Stocking Quantity

200.00

Economic Order Quantity

50.00

Lead Time

2

Quantity On Order

0.00

Quantity to Reorder

0.00

Auto Delete Bin Locations ⓘ

☐

Automatically calculate the quantity of a Product Item to reorder based on Quantity Available (Quantity On Hand – Quantity Reserved), Minimum Stocking Quantity, Economic Order Quantity and Vendor specific Purchase Pack Quantity (# of units in a package).

When inventory falls below desired levels, recommended reorder quantities are calculated. More specifically, When the Quantity Available (Quantity On Hand – Quantity Reserved) falls below the Minimum Stocking Quantity + Quantity On Order, a suggested Quantity to Reorder is derived. The Economic Order Quantity represents the minimum suggested Quantity to Reorder. A Product Item can typically be purchased in many different packaging configurations, i.e., Each, 6 in a box, etc. These packaging configurations, and their respective purchase prices, are represented as Vendor Case Packs. A Product Item can have many Vendor Case Packs. A Preferred Vendor Case Pack may be specified on a Product Item. A Purchase Order (requisition) can be automatically generated using the Preferred Vendor Case Pack when the Auto Replenish Boolean attribute is true.

Figure 8 – Product Item with Quantity Available, Minimum Stocking Quantity, Economic Order Quantity, Quantity On Order, Quantity to Reorder, Auto Replenish and Preferred Case Pack details.

Product Item Number	PI-1399	Owner	Mike Edwards
Product Name	1/4-20 Hex Head Cap Screw, 1" Length	Status	Active
Description ⓘ	1/4-20 Hex Head Cap Screw, 3/4" Length Box of 10 EA	Noun	Cap Screw
Location	Florida Warehouse	Modifier	Hex Head
		Search	pi

▼ Stocking Details			
Quantity On Hand	219.00	Minimum Stocking Quantity	200.00
Quantity Reserved	6.00	Economic Order Quantity	50.00
Quantity Available	213.00	Lead Time	2
Quantity Unit Of Measure	EA - Each	Quantity On Order	0.00
Primary Bin Location	1-A-1-A	Quantity to Reorder	0.00
Primary Bin Quantity On Hand	179.00	Auto Delete Bin Locations ⓘ	☐

▼ Replenishment Details	
Primary Replenishment Method	Purchase
Source Location	
Source Product Item	
Auto Replenish ⓘ	☒

▼ Purchasing Case Pack Details	
Preferred Vendor Case Pack	CP-000386
Preferred Vendor	Grainger
Vendor Part Number	X234164
Case Pack Quantity ⓘ	20.00
Case Pack Unit of Measure ⓘ	BX - Box
Case Pack Purchase Price ⓘ	\$15.00
Case Pack Quantity to Re-order ⓘ	0.00

Manage inventory valuation methods; Weighted Average, Last In, Standard.

Three different Inventory Valuation Methods are available for a Product Item: Weighted Average, Last In, and Standard.

Weighted Average is automatically calculated when Product Items are received on a Purchase Order. Last In is automatically populated from the Purchase Order Unit Cost for a Product Item when last received. Standard is a manually populated value.

If Last In or Standard are selected and a Product Item is received on a Purchase Order with a different purchase price, an inventory revaluation variance will be calculated and a corresponding general ledger detail record created.

The Product Item Unit Value is used as the actual cost when consumed.

Figure 9 – Product Item with Inventory Valuation Method and corresponding costs.

Cost & Usage			
Inventory Valuation Method ⓘ	Weighted Average		
Unit Value	\$0.75	Weighted Average Cost	\$0.75
On Hand Value	\$164.25	Last In Cost ⓘ	\$0.75
		Standard Cost	\$0.00
GL Expense Account Override ⓘ			

Manage bulk stock and serialized inventory (each unit is a unique Asset).

Product Items can be bulk stock, i.e., one unit is no different than another, or serialized, i.e., each unit is uniquely identified. When a Product Item is serialized, an Asset record exists for each unique unit. When receiving serialized Product Items on a Purchase Order, a user must enter Serial numbers for each received unit. When a serialized Product Item is consumed, a user must choose the specific serial number to remove from inventory. When using record types on an Asset, you must specify the record type of the Asset to be automatically created.

Figure 10 – Serialized inventory set up on a Product Item.

Serialized Inventory Details			
Serialized	Yes	Condition ⓘ	New
Serialization Control Point	At Inventory Receipt	Asset Record Type ⓘ	Master

Specify preferred inventory replenishment method, i.e. Purchase Orders to a Vendor vs. internal Transfer Orders to a Source Location.

Product Items within a Location can be sourced through two different methods, Purchase or Transfer. If the Primary Replenishment Method is Purchase, you specify a Preferred Vendor Case pack to satisfy the Purchase Order requirements. If the Primary Replenishment Method is Transfer, you specify the Source Location from which the fulfillment occurs. The corresponding Product Item at the Source Location is automatically identified.

Figure 11 – Product Item Replenishment Details.

▼ Replenishment Details	
Primary Replenishment Method	Transfer 
Source Location	Florida Warehouse 
Source Product Item	PI-1403 

Auto Replenish  ☒

Note: AssetOptics for Salesforce Field Service provides custom objects to manage inventory transfers between Locations. *See Transfer Orders for further details.*

Perform gain/shrink Quantity On Hand adjustments resulting from cycle/physical inventory counts.

From a Product Item record, a user can invoke the New Inventory Transaction action to adjust the Quantity On Hand selecting a Bin Location, a Transaction Type (gain or shrink) and an adjustment quantity.

Figure 12 – Inventory Transaction LWC invoked from the New Inventory Transaction action on the Product Item record page.

The screenshot displays the 'Create Inventory Transaction' modal form. The form is titled 'Create Inventory Transaction' and contains the following fields:

- Product Item:** PI-2563
- Product Name:** 5VX-750 Belt
- Bin Locations:** A table with columns Name, OH Qty, and Primary. The first row shows '1-A-1-A' with '0' and 'true'.
- Trans Type:** A dropdown menu with 'Gain' selected.
- Quantity:** An empty input field.
- Comment:** An empty text area.
- Bin Location:** A dropdown menu with '1-A-1-A' selected.
- Buttons:** 'Save' and 'Cancel' buttons at the bottom.

The background page shows the 'Product Item' record for 'PI-2563'. The 'New Inventory Transaction' button is highlighted with a red arrow. The 'Product Attributes' table is also visible, showing details for the '5VX-750 Belt'.

Attribute Name	Attribute Value
Product Name	Cogged V-Belt
Product Number	5VX
Product Number	5VX750
Number of Ribs	1
Length	75"
Width	5/8"
Thickness	17/32"
Material	Fabric Cover, Polyester Cords, Rub...

Product Requests

Create multi-line Product Requests from Work Order or Work Order Line Item Products Required

From a Work Order with Products Required, a user can create a Product Request by invoking the Request Products Required action. The user will be prompted to enter a Need by Date and select a Location from where the Product Request will be fulfilled. A list of Product Items in the Location corresponding to the Products Required will be presented to the user. A Product Request with Product Request Line Items will be created. If any of the Products Required are not inventoried at the selected Location, the user will be presented with a list of these Products so that they may create an additional Product Request from an alternate Location.

Figure 13 – Product Request LWC invoked from the Work Order.

The screenshot displays the AssetOptics web interface. On the left, a sidebar shows the 'Work Order' details for '00001546', including the owner 'Joe Edwards' and a 'Rebuild Pump' status. The main area features a 'Choose Location' modal dialog. This dialog has a 'Need By Date' section with a date of 'Jul 15, 2021' and a time of '5:47 PM'. Below this is a 'Location' dropdown menu currently set to 'Florida Warehouse'. A table titled 'Stocked at Selected Location' lists products: 'PREQ-0647 Prefilter' with an open quantity of 1, and 'PREQ-0648 V11-24120-03 AIRWAY PRESSURE FITTING' with an open quantity of 2. A red arrow points to the 'Request Products Required' button in the top right of the modal. Another red arrow points to the 'Florida Warehouse' location dropdown. The background shows a list of related items like 'Service Appointments (0)', 'Resource Preferences (0)', 'Products Consumed (0)', and 'Time Sheet Entries (0)'.

Automatically match Product Items from the designated Source Location

When a Product Request is created and the Source Location is specified, the Product Request Line Items are automatically referenced to the corresponding Product Item.

Calculate Product Request total costs based on Products Requested and the actual Unit Costs from the allocated Product Items.

Each Product Request Line Item has an Extended Cost Amount based on the Requested Quantity and the Product Item Unit Cost. The Extended Cost Amount for all Product Request Line Items is summarized on the Product Request for a Total Request Cost.

Figure 14 – Product Request with Total Request Cost.

Details		Related	
Information Product Request Number PR-0385 Need By Date 7/15/2021 5:47 PM Work Order 00001546 Work Order Line Item Source Location Florida Warehouse			
Owner Mike Edwards		Status Draft	
		Total Request Cost \$82.45	

Reserve inventory based on Need by Date and Lead Time.

The Product Request Line Items will place a reservation on the Product Item in the selected Location based on the Need by Date and the Product Item Lead Time.

Figure 15 – Product Request Line Item with Quantity Requested, Need by Date and Product Item Lead Time.

Product Request Line Item					
PRLI-0001 Work Order 00001546 Product Prefilter Source Location Florida Warehouse Product Item PI-1460 Quantity Requested 1.00 Need By Date 7/15/2021 5:47 PM					
Details		Related			
Information Product Request Line Item Number PRLI-0001 Product Prefilter Product Description Prefilter Quantity Requested 1.00 Quantity Unit Of Measure EA - Each Quantity Consumed 0.00 Open Quantity 1.00					

The Product Request is **the** document that serves to place demand on inventory and thus drive the rest of the inventory replenishment processes.

Consume Products to a Work Order from Product Requests.

A user can Issue Product Item inventory directly from the Product Request Line Item record page by invoking the Issue Inventory action.

Cancel unused Product Request line items.

A user can Cancel a Product Request Line Item. Once canceled, any inventory reservation will be released.

Figure 16 – Product Request Line Item with Cancel Line and Issue Inventory actions.

Product Request Line Item
PRLI-0001

Work Order [00001546](#) Product [Prefilter](#) Source Location [Florida Warehouse](#) Product Item [PI-1460](#) Quantity Requested 1.00 Need By Date 7/15/2021 5:47 PM

[Edit](#) [Cancel Line](#) [Issue Inventory](#)

Details Related

Information

Product Request Line Item Number PRLI-0001 Parent [PR-0385](#)

Related List Quick Links 1

[Products Consumed \(0\)](#)

Work Types

Derive Planned Product Costs from Products Required

When a user adds Products Required to a Work Type, each Product Required line will have a Planned Product Cost based on the Quantity Required and the Product Unit Cost. The Planned Product Costs are summed at the Work Type to provide a Planned Product Cost.

Figure 17 – Work Type with Planned Product Cost.

Description

Work Type Name Rebuild Pump

Description Rebuild Gorman-Rupp centrifugal pump

Scheduling Related

Duration Type Hours

Estimated Duration 4.00

Auto-Create Service Appointment ☐

Minimum Crew Size 1

Recommended Crew Size 1

Service Report Template

Planned Product Cost ⓘ \$120.99

Work Orders

Track Planned Product Cost vs. Actual Product Cost

Planned Product Cost is derived on a Work Order by summing the Planned Product Cost for each Product Required lines. Planned Product Cost = Quantity Required x Unit Cost. The Unit Cost is based on the Product Unit Cost.

Total Product Consumed Cost is derived by summing the Product Consumed Cost for each of the Product Consumed lines. Product Consume Cost = Quantity Consumed x Unit Cost. The Unit Cost is based on the Product Item Unit Cost.

Issue Product Items directly from a Work Order

An LWC is provided on the Work Order enabling a user to issue a Product Item directly from the Work Order. This LWC provides the user with the ability to select the Bin Location from which they are issuing the Product Item and if the Product Item is serialized, select the Serial Number. Each serialized unit is represented as an Asset.

Create Product Requests based on Products Required

From a Work Order with Products Required, a user can create a Product Request by invoking the Request Products Required action. The user will be prompted to enter a Need by Date and select a Location from where the Product Request will be fulfilled. A list of Product Items in the Location corresponding to the Products Required will be presented to the user. A Product Request with Product Request Line Items will be created. If any of the Products Required are not inventoried at the selected Location, the user will be presented with a list of these Products so that they may create an additional Product Request from an alternative Location.

Figure 18 – Product Request LWC invoked from the Work Order.

The screenshot displays the AssetOptics Work Order interface for Work Order 00001546. The 'Details' tab is active, showing information such as the Owner (Joe Edwards), Case, Work Order Number (00001546), Work Type (Rebuild Pump), Status (New), Account, Case, Service Report Language, Service Report Template, Start Date, End Date, and Product Costs (Planned Product Cost: \$120.99). A modal titled 'Choose Location' is open, prompting the user to select a location for the Product Request. The modal includes a 'Need By Date' section with a date picker set to Jul 15, 2021, and a time picker set to 5:47 PM. Below this is a 'Location' dropdown menu currently set to 'Florida Warehouse'. A table titled 'Stocked at Selected Location' lists products available at the chosen location:

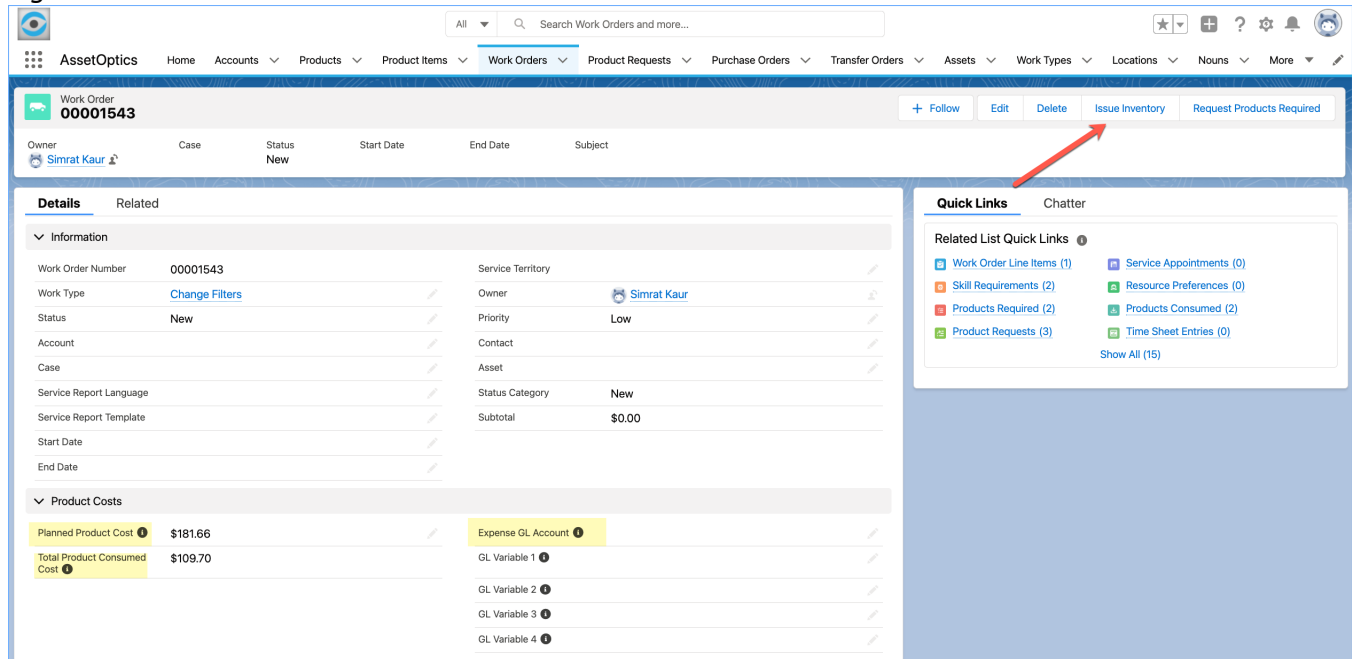
Product Required	Product	Product Description	Open Qty To Request
☐	PREQ-0647	Prefilter	1
☐	PREQ-0648	V11-24120-03 AIRWAY PRESSURE FITTING	2

The modal also includes 'Cancel' and 'Save' buttons. A red arrow points to the 'Request Products Required' button in the top right corner of the Work Order interface, indicating the action that triggers this modal.

Manage work order specific general ledger expense accounts and subledger account codes

An Expense GL (general ledger) Account is provided on a Work Order. This field is populated from the Expense GL Account designated on the Work Order Asset. The Work Order Expense GL Account can be overridden with a user selected Expense Account. The Work Order Expense GL Account will be used on the debit side of a GL Detail record when Issuing Product Item (Products Consumed) to the Work Order.

Figure 19 – Work Order



The screenshot displays the AssetOptics Work Order interface for Work Order 00001543. The top navigation bar includes links for Home, Accounts, Products, Product Items, Work Orders, Product Requests, Purchase Orders, Transfer Orders, Assets, Work Types, Locations, Nouns, and More. The Work Order details section shows the Owner as Simrat Kaur, Case as New, and Status as New. The Product Costs section shows a Planned Product Cost of \$181.66 and a Total Product Consumed Cost of \$109.70. The Expense GL Account is highlighted in yellow. The Quick Links section on the right provides links to related lists such as Work Order Line Items, Service Appointments, Skill Requirements, Resource Preferences, Products Required, Products Consumed, Product Requests, and Time Sheet Entries. A red arrow points to the 'Issue Inventory' button in the top right corner.

Details	Related
Information	
Work Order Number	00001543
Work Type	Change Filters
Status	New
Account	
Case	
Service Report Language	
Service Report Template	
Start Date	
End Date	
Product Costs	
Planned Product Cost	\$181.66
Total Product Consumed Cost	\$109.70
Expense GL Account	
GL Variable 1	
GL Variable 2	
GL Variable 3	
GL Variable 4	

Quick Links

Related List Quick Links

- Work Order Line Items (1)
- Skill Requirements (2)
- Products Required (2)
- Product Requests (3)
- Service Appointments (0)
- Resource Preferences (0)
- Products Consumed (2)
- Time Sheet Entries (0)

Show All (15)

Purchasing

Purchase Requisitions & Purchase Orders

Purchase Requisitions can be converted to Purchase Orders (two Recordtypes, Requisition & Order on the Purchase Order object) through an approval process. Purchase Order Lines can be created for both Stock (Product Items) and Service lines (two Recordtypes, Stock & Service on the Purchase Order Line object).

Purchase Product Items for inventory replenishment.

The Stock type Purchase Order Line requires a reference to a Product Item. You can specify an Order Quantity, Unit Cost, Purchase Unit of Measure, Purchase Pack Quantity, and Vendor Part Number on Purchase Order Stock Line. PO Stock lines are ordered and received in the Purchase Unit of Measure. All transaction quantities are automatically converted to the Product Item stocking Unit of Measure as are the Unit Costs. If a Product Item is designated as Serialized, Asset records are created during the PO Stock Line receiving process as the user is required to enter Serial numbers.

Purchase services and non-stock items.

The Service type Purchase Order Line only requires a text string definition. Since a Product Item is not referenced, there is no integration to inventory. The Service lines are considered consumed upon receipt.

Track vendor specific case pack configurations and pricing.

A Vendor Case Pack is created from the Product Item record and defines a Vendor, Vendor Part Number, Purchase Unit of Measure, Purchase Pack Quantity, and Purchase Price. A Product Item can have many Vendor Case Packs, one of which is specified as the Primary. When Purchase Requisitions are automatically created as part of the inventory replenishment process, the Preferred Vendor Case Pack is used to create the Stock PO Lines.

Automatically create Purchase Requisitions based on inventory replenishment needs.

A Purchase Requisition can be generated when the inventory levels for a Product Item falls below its Minimum Stocking Quantity. These Purchase Requisitions can be manually created from the Product Item list view or automatically created via a scheduled batch APEX job. The vendor and order quantity are automatically derived in the following manner.

The Quantity Available for a Product Item is defined as the Quantity On Hand minus the Quantity Reserved. When the Quantity Available plus the Quantity On Order falls below the Minimum Stocking Quantity, a Quantity to Reorder is calculated. The minimum Quantity to Reorder will be the Economic Order Quantity. These quantities are specified in the Product Item Quantity Unit of Measure. The Quantity to Reorder is then compared to the Case Pack Quantity on the Preferred Vendor Case Pack to calculate a Case Pack Quantity to Reorder.

A Purchase Requisition will be created for each Location and Vendor permutation. A PO Stock Line is created for the Case Pack Quantity to Reorder using the Purchase Price, Purchase Unit of Measure, Purchase Pack Quantity, and Vendor Part Number on the Preferred Vendor Case Pack.

Transfer Orders

Automatically create Transfer Orders to replenish Product Items between Locations.

A Primary Replenishment Method is specified on a Product Item record. The two choices are Purchase or Transfer. If Purchase is selected, the user specifies a Preferred Vendor Case Pack. If Transfer is selected, the user identifies a Source Location and Source Product Item. In the example of a service van being fulfilled from a depot, the depot would be the Source Location and the Source Product Item would be the matching Product Item in the depot. A flow labeled Assign Transfer Source Product Item is conditionally visible on the Product Item record page that will assist the user in identifying candidate Source Locations and the Source Product Item.

When transfer sourced Product Items require replenishment, a Transfer Order can be created similarly to Purchase Orders, either manually from the Product Item list view or automatically via a scheduled batch APEX job.

There are two types of Transfer Orders, Transfer In and Transfer Out. The Transfer In order is first created at the destination location. When the Status of the Transfer In order is updated to Released, a mirror image Transfer Out order is created from the Source Location. The Transfer In and Transfer Out orders are joined together as Related Orders. Each Transfer Order Line on the Transfer In order will have a matching Transfer Order Line on the Transfer Out order.

When the Transfer Order Lines on the Transfer Out order have been transacted (physically picked and shipped), they can be transacted (received and putaway) on the Transfer In order.

All Transfer Order Quantities occur in the Product Item Quantity Unit of Measure.

Accounting

Specify balance sheet & expense accounts to support Product Item accounting.

AssetOptics for Salesforce Field Service provides core inventory accounting features. There are three objects used to deliver these features.

1. GL Accounts – General Ledger Accounts are specified as either Expense or Balance Sheet accounts.
2. GL Variables – General Ledger Variables are used to support subledger accounting. There are four GL Variables. GL Variables 1 and 2 are typically configured to represent Company and Cost Center. GL Variables 3 and 4 may be optionally used for Projects, Assets, Work Orders.
3. GL Details – GL Details contain the needed transactional details to support a journal entry. GL Details contain a debit account, credit account, 4 GL Variables, Current Amount, Type, and relationships to the source inventory transactions.

GL Accounts and GL Variables are specified on the following objects:

1. Asset
2. Location
3. Product Item
4. Work Order

Capture debits & credits for all Inventory Transactions.

GL Details are created for all inventory transactions including Purchase Order Receipts, Inventory Gain and Shrink Adjustments, Inventory Issues, Inventory Revaluation Variances.