

Optima Pro Installation & User Guide

Contents

1. Introduction.....	3
2. Product Installation	3
3. Salesforce Configuration	4
3.1 Profiles.....	4
3.2 Tabs	4
3.3 Page Layouts.....	4
3.4 Custom Settings.....	4
4. Entities & Definition.....	5
5. Optima Pro Configuration	6
5.1 General Configuration	6
5.2 Service Organization Configuration.....	9
5.3 Service Contracts & Warranty Configuration	12
5.4 Preventive Maintenance Configuration	15
5.5 Work Order Automation Rules.....	17
6. Optima Pro - End User Guide	19
6.1 Account	20
6.2 Contact	22
6.3 Location.....	22
6.4 Installed Product	24
6.5 Product Warranty.....	24
6.6 Service Contract	25
6.7 Case	26
6.8 Work Order.....	28
6.9 Inventory Management Process	36

1. Introduction

In the present times all business segments are laying ample emphasis on Customer service and the success of any business relies on how well its processes are streamlined. Field service industry is one such segment that is often under pressure to synchronize their tasks. They have the high-end responsibility of keeping a track of on-site service, dispatch of technicians for installations, repairs, maintenance and honoring the customer SLAs. The complexity of their job lies in getting real time updates from the technicians, managing efficient job scheduling and giving timely service to the Customers.

Damco understands your changing needs and the urgency to perform and we are proud to introduce a very powerful product from our Salesforce Practice - "OPTIMA PRO".

This can be your one stop field service software solution to manage warranties, contracts, field service scheduling, spare parts inventory and the service organization while delighting the customers and driving business results.

This product has been designed with great consideration and keeping the industry standards in mind. It is a comprehensive product but is also kept flexible enough to be exclusively customized to suit your business needs.

This document serves as an Installation, Configuration and User guide to get you rolling with the new Application quickly.

2. Product Installation

Salesforce Administrators and Users with the "Download AppExchange packages" permission can download and install 'Optima Pro' package from AppExchange, a complete marketplace for cloud computing applications and consulting partners.

- Click the AppExchange link in your organization or go to www.appexchange.com.
- Browse the AppExchange site to find the 'Optima Pro' application to install.
- Click 'Get It Now' from the application information page.
- Select your environment type: production or sandbox (test).
- Enter the requested information. For production environments, enter your username and password, read the user terms, accept the license agreement and click Install. For sandbox environments, complete the information in the form provided and click Submit. This package is removed from your sandbox organization whenever you create a new sandbox copy.
- Review the package items and click Continue.
- Review the API access that package components have been granted to ensure they are acceptable, and click next if they are. If they are not, click Cancel. For more information, see "About API and Dynamic Apex Access in Packages" in the Salesforce online help.
- Grant access to all users specifies the following settings on all internal custom profiles:
 - Object permissions—"Read," "Create," "Edit," "Delete," "View All," and "Modify All" are all enabled.
 - Field-level security—Set to visible and editable for all fields.

- Apex classes—Enabled.
 - Visualforce pages—Enabled.
 - App settings—Enabled.
 - Tab settings—Determined by the package creator.
 - Page layout settings—Determined by the package creator.
 - Record Type settings—Determined by the package creator.
- Click Install to install all the components in the package you have selected.

3. Salesforce Configuration

Once you have installed Optima Pro, some basic configurations are needed to make the system ready for end users:

3.1 Profiles

Optima Pro has lots of objects, fields, VF Pages, Apex Classes, Triggers, Page layouts, Tabs etc. These must be configured for the end users appropriately depending on the access rules of the organization.

3.2 Tabs

Customize the tabs on the Application to reflect the best optimized flow as recommended by Optima Pro in the following order:

Home, Products, Accounts, Contacts, Locations, Installed Products, Service Contracts, Cases, Work Orders, Optima Pro Configuration, Check In. This pattern may be changed for specific profiles if needed.

3.3 Page Layouts

Please update the User Profiles to set the page layouts for the standard objects like Account, Product, Case, Contact, PriceBook etc. to the Optima Pro provided page layouts.

3.4 Custom Settings

In Optima Pro the system admin needs to specify the value for one particular custom setting – ‘Default Dispatch Window’. This custom setting stores Default time (in Minutes) that is added to the Dispatch Time of the Work Order to calculate the estimated time for which the technician would be busy and not available for picking up another Work Order. The default value for this is 120 mins which can be edited by the system admin as desired. In case other scheduling parameters are defined on the Work Order they would be utilized to find the best available Technician.

4. Entities & Definition

Objects used in the Optima Pro application and their definition.

Object	Definition / Purpose
Account	Accounts can be customers, partners, suppliers, and service providers for the organization
Contact	Contacts are individuals associated with the accounts. It stores information about the contact like phone numbers, addresses etc.
Location	Location stores the physical location information of the Account. An account may have one or more physical locations.
Installed Product	Installed Product refers to the product delivered/ installed at the customer's location. Each Installed Product can be tracked through Serial/ Lot number.
Product Warranty	Product Warranty refers to the Warranty defined for a particular Installed Product. With every Product Warranty, a Warranty Term is associated.
Service Contract	Service Contract is a service agreement that documents the details of entitlement(s) provided to a customer for the products purchased.
Technician	A technician is an individual who performs a service for a customer against a work order. A technician can belong to multiple service teams / service territories and can possess multiple skills.
Expertise	A skill that a technician has that is required to perform a particular service.
Case	Cases are used to track detailed description of a customer's problem / feedback.
Work Order	Work Orders are used to manage the entire field service process to perform a field service job which may or may not be related to a case.
Inventory Management	Inventory Management supports parts requests & receipts, stock adjustment, stock transfer of the inventory and maintains the detailed history of transactions of items.
Preventive Maintenance Plan	Preventive Maintenance Plan ensures a customer does not miss out on periodic maintenance services for the products purchased.
Service Quote	Service Quote contains the cost of the service that is sent to the customer in order to get their approval.
Proforma Invoice	Proforma Invoice refers to the estimated invoice sent to a customer in advance of delivery of products or services.
Account	Accounts can be customers, partners, suppliers, and service providers for the organization

5. Optima Pro Configuration

This section details the steps needed to setup the master data and configurations as well as some automation rules and processes which would govern how the system behaves when the end users start using it. These are essential steps that an administrator should perform for the best utilization of the system.

Optima Pro Configuration

General Configuration	Service Organization Configuration	Service Contracts & Warranty Configuration	Preventive Maintenance Configuration	Work Order Automation Rules
Product Setup Use this link to define the Products that are serviced or work as replacement parts for the Work Orders carried out.				
Service Activities Use this link to define the activities that are performed during a periodic Service or as part of a Work Order. You may choose to offer these services as part of a Service Contract too.				
Service Pricebooks Use this link to define the pricing structure for the Services that you offer. This would be used to generate billing and invoicing information for the customer.				

5.1 General Configuration

5.1.1 Product Setup

- It defines the Products that are serviced or work as replacement parts for the Work Orders carried out.
- On clicking 'Product Setup' button, the control is redirected to the 'Product' tab that displays all existing products in the system. You can also create a new product by clicking 'Add' button and adding more details on the product edit page.
- You can define price-books and add product prices in one or more price-books. By default, Optima Pro retrieves the price of a product automatically from Standard Price book.

Some fields and related records of Product Setup that need special mention:

Enable Serialized Tracking of Stock – Checking this option will enable you to auto generate the Serial Numbers of Products available in a Product Stock. This is best used for inventoried products.

Stockable – This option enables you to maintain a decent quantity of the stock either in a warehouse or in trunk stock. User will not be able to add product stock for a product unless this option is selected.

OEM/Vendor – The Account (if maintained in Optima Pro) which is the manufacturer of this Product.

Inherit Parent Warranty – This option is useful for performing Auto Entitlement check on the Work Order. If Inherit Parent Warranty is checked in Auto Entitlement Rules configuration and also for Product of parent installed product of the faulty component, then only the Auto Entitlement will be performed.

Product Counters – Product Counter of ‘Setup’ record type is used to define counter based Warranty or Service Contract coverage for a Product. It keeps track of coverage for the product either for Warranty or for a Service Contract from its ‘Coverage Effective From’ value.

Coverage Effective From – Product Counter starts counter based on Warranty or Service Contract in either increasing or decreasing order depending on the value selected in ‘Coverage Effective From’ pick-list i.e. counter can start from Installed Date of Product or from Service Contract Start Date, etc.

Coverage Starts At - It serves as an initial value for the product counter.

Coverage Limit - It defines the range up till which product will be applicable for product counter.

Product Detail		Edit Delete Clone	
Product Name	GenWatt Diesel 1000kW	Active	☒
Product Code	GC1060	Stockable	☒
Product Family	Inherit Parent Warranty		☐
OEM/Vendor	Enable Serialized Tracking of Stock		☐
Created By	Damco User, 4/19/2017 6:39 AM	Last Modified By	Damco User, 4/20/2017 6:01 AM

▼ Description Information

Product Description

Edit Delete Clone

Standard Price Standard Price Help ?

Action	Standard Price	Active
View Edit Del	\$100,000.00	☒

Price Books Add to Price Book Edit All Price Books Help ?

Action	Price Book Name	List Price	Use Standard Price	Active
View Edit Del	Standard	\$100,000.00	☐	☒

Product Counters New Product Counters Product Counters Help ?

Action	Product Counters Name	Coverage Effective From	Coverage Starts At	Coverage Limit
Edit Del	PROD-CNTR-00000000	MOBSVC_Date_Installed__c	1,000.00	500,000.00

5.1.2 Service Activities

- This defines the activities that are performed during a periodic Service or as part of a Work Order. You can also choose to offer these services as part of Service Contract.
- On clicking ‘Service Activities’ button, the control is redirected to the ‘Service Activities’ tab that displays all existing Service Activities in the system. You can also create a new Service Activity by clicking ‘New Service Activity’ button and adding more details on the Service Activity edit page.

Some related records of Service Activities that need special mention:

Activity Product – Once you have created a Service Activity you can link this activity to a product, or a product family or a product line by creating a new ‘Activity Product’.

Service Price-book Entry – You can define price-books and add service pricing structure for your ‘Activity Product’ by creating a new Service Price-book Entry.

Labor Pricing – ‘Activity Product’ can be linked to a Service Contract or to a Service Plan with service pricing information by creating a new Labor Pricing record.

Service Activity Detail
Edit Delete Clone

Service Activity Name

Product Installation

Description

Activity Type

Installation

Created By

Damco User, 4/20/2017 3:09 AM

Last Modified By

Damco User, 4/20/2017 3:09 AM

Edit Delete Clone

Activity Products
New Activity Product
Activity Products Help

Action	Activity Product Name	Product	Product Family	Product Line
<a>Edit <a>Del	<a>ACT-PROD-00000005	<a>GenWatt Diesel 1000kW		
<a>Edit <a>Del	<a>ACT-PROD-00000006	<a>SLA: Platinum		
<a>Edit <a>Del	<a>ACT-PROD-00000007	<a>SLA: Gold		

Service Pricebook Entries
Service Pricebook Entries Help

Action	Service Pricebook Entry Name	Activity Product	Entry Type	Price Book	Product	Product Family	Product Line	Regular Rate	Unit
<a>Edit <a>Del	<a>SRVC-PRCEBK-ENTRY-00000000	<a>ACT-PROD-00000005	Labor	<a>Service Pricebook A	GenWatt Diesel 1000kW			\$50.00	Flat Rate
<a>Edit <a>Del	<a>SRVC-PRCEBK-ENTRY-00000001	<a>ACT-PROD-00000007	Labor	<a>Service Pricebook A	SLA: Gold			\$70.00	Flat Rate
<a>Edit <a>Del	<a>SRVC-PRCEBK-ENTRY-00000002	<a>ACT-PROD-00000006	Labor	<a>Service Pricebook A	SLA: Platinum			\$65.00	Flat Rate

Labor Pricing
Labor Pricing Help

No records to display

Work Order Lines
Work Order Lines Help

Action	Work OrderLine Name
<a>Edit <a>Del	<a>WRK-ORD-LNE-00000000

5.1.3 Service Price-book

- This defines the pricing structure for the services that are offered to a customer.
- Service Price-books can be used to generate billing and invoicing information for the customer.
- On clicking 'Service Price-book' button, the control is redirected to the 'Service Price-book' tab that displays all existing service price-books in the system. You can also create a new Service Price-book by clicking 'New Service Price-book' button and adding more details on the Service Price-book edit page.

Some related records of Service Price-books that need special mention:

Service Price-book Entry - Once a price-book is created, you can define a new Service Price-book Entry for it. In service price-book entry you should enter details like service activity, activity product, and service pricing structure.

Service Pricebook Detail
[Edit](#) [Delete](#) [Clone](#)

Service Pricebook Name

Service Pricebook A

Description

Active

✓

Created By

Damco User, 4/20/2017 12:49 AM

Last Modified By

Damco User, 4/20/2017 12:49 AM

[Edit](#) [Delete](#) [Clone](#)

Service Pricebook Entries
[New Service Pricebook Entry](#)
[Service Pricebook Entries Help](#)

Action	Service Pricebook Entry Name	Activity Product	Activity Type	Activity Id	Entry Type	Product	Product Family	Product Line	Regular Rate	Unit
Edit Del	SRVC-PRCEBK-ENTRY-00000000	ACT-PROD-00000005	Installation	Product Installation	Labor	GenWatt Diesel 1000kW			\$50.00	Flat Rate
Edit Del	SRVC-PRCEBK-ENTRY-00000001	ACT-PROD-00000007	Installation	Product Installation	Labor	SLA: Gold			\$70.00	Flat Rate
Edit Del	SRVC-PRCEBK-ENTRY-00000002	ACT-PROD-00000006	Installation	Product Installation	Labor	SLA: Platinum			\$65.00	Flat Rate


Service Contracts
[Service Contracts Help](#)

Action	Service Contract Name	Account	Active	All Contacts Covered	All Products Covered	All Services Covered	All Sites Covered	Contract Price	End Date
Edit Del	SVC-CNTRCT-00000000	Mahindra Co	✓	☐	☐	☐	☐	\$500	7/5/2017
Edit Del	SVC-CNTRCT-00000001	Damco Solutions	☐	✓	☐	☐	✓	\$165	7/2/2019


Service Plans
[Service Plans Help](#)

Action	Service Plan Name	Active	Description	List Price	Parts Pricebook
Edit Del	Professional Plan	✓		\$150	Standard Price Book

5.2 Service Organization Configuration

5.2.1 Skills

- A skill is used to measure the expertise required during service delivery. A Technician can be assigned to a Work Order on the basis of skills.
- When creating a new Skill, you are required to enter information like 'Skill Name', 'Skill Area', 'Skill Category' and 'Skill Level'.
- When configuring Technician Dispatch Rules (refer 2.5.1), a Technician can be assessed for a Work Order on the basis of matching Skill.
- On clicking 'Skills' button, the control is redirected to 'Skill' tab that displays all existing skills in the system. You can also create a new skill by clicking 'New Skill' button and adding more details on the skill edit page.

Skill Detail
[Edit](#) [Delete](#) [Clone](#)

Skill Name

Troubleshooting

Active

✓

Description

Troubleshooting and resolution!!

Skill Level – High

10

Skill Area

All

Skill Level – Medium

5

Skill Category

Service

Skill Level – Low

1

Created By

Damco User, 4/19/2017 7:13 AM

Last Modified By

Damco User, 6/30/2017 1:50 AM

[Edit](#) [Delete](#) [Clone](#)

5.2.2 Service Territories

- Service Territory is logical grouping of geographical areas. It defines the geographical range of a technician up to which he can be considered for a Work Order.
- When configuring Technician Dispatch Rules (refer 2.5.1), a Technician can be assessed for a Work Order on the basis of matching Service Territory.
- On clicking 'Service Territories' button, the control is redirected to 'Service Territory' tab that displays all existing service territories. You can also create a new service territory by clicking 'New Service Territory' button and adding more details on Service Territory edit page.

Some fields, buttons and related records of Service Territories that need special mention:

Business Hours – It defines the working hours of the service territory. Business hours defines the complete working schedule of a territory for the entire week.

Break Hours – It defines the break hours of the Territory.

Service Territory Coverage – It defines the area range that can be covered by a service territory.

Auto-Generate Zip Based Coverage – This option enables you to define the Zip Code based Service Territory Coverage, by providing the Start Zip Code and End Zip Code.

Adjacent Service Territory Coverage – You can define a service territory that is adjacent to a given territory and its coverage range.

Dispatcher Access – You can define the user(s) who can dispatch a Technician from a Service Territory for a Work Order. The dispatcher access can be also specified at the Service Team level where required.

Service Territory Detail
[Edit](#)
[Delete](#)
[Clone](#)
[Auto-Generate Zip Based Coverage](#)

Service Territory Name	New Jersey Region	Owner	Damco User [Change]	
Service Territory Code	NJR	Active	☒	
Parent Service Territory		Business Hours	Standard	
Description		Break Hours		
Average Speed		Per Hour Cost		
Average Driving Time		Per Mile Cost		
Max Daily Hours	10	Fixed Cost		
Max Distance		Mode Of Travel	Driving Avoid Toll	
Max Hours				
Created By	Damco User , 4/19/2017 7:19 AM		Last Modified By	Damco User , 7/6/2017 1:09 AM

[Edit](#)
[Delete](#)
[Clone](#)
[Auto-Generate Zip Based Coverage](#)

Service Territory Coverage
[New Service Territory Coverage](#)
[Service Territory Coverage Help](#)

Action	Service Territory Coverage Name	Active	Type	Value	Adjacent Service Territory
Edit Del	STC-00000014	☒	State	New Jersey	

Adjacent Service Territory Coverage
[New Service Territory Coverage](#)
[Adjacent Service Territory Coverage Help](#)

No records to display

Dispatcher Access
[New Dispatcher Access](#)
[Dispatcher Access Help](#)

Action	Dispatcher Access Name	Dispatcher	Service Team
Edit Del	DISP-ACCS-00000003	Damco User	Ninja Team

5.2.3 Service Teams

- Service Teams are part of Service Territories. One service territory may have multiple service teams which could be segregated on the basis of different parameters.
- On clicking 'Service Teams' button the control is redirected to 'Service Team' tab that displays all existing service teams. You can also create a new service team by clicking 'New Service Team' button and adding more details on Service Team edit page.

Some fields, buttons and related records of Service Teams that need special mention:

Validate Address – It provides the auto population of the 'Geo-Location' value on the basis of the Address fields on the Service Team. The location can also be viewed on the 'Location Map' that uses the coordinates of the Geo-location value.

Add Technician – A technician can be added to a Service Team corresponding to a Service Territory by clicking 'Add Technician' button.

Dispatcher Access – You can define the user(s) who can dispatch a Technician from a Service Team for a Work Order. The dispatcher access can be also specified at the Service Territory level where required.

Expertise – You can define the skills available with a Service Team. When configuring Technician Dispatch Rules (refer 2.5.1), a Technician can be assessed for a Work Order on the basis of matching Service Team Expertise. The expertise can also be linked with a Technician where required.

Labor Cost – You can specify labor cost for the entire team. The labor cost can be also specified at the technician level where required.

Service Locations Covered – You can specify customer locations that are covered by a particular Service Team.

Service Team Detail
Edit Delete Clone Validate Address Add Technician

Service Team Name	Ninja Team	Active	☒
Group Code	NT	Street	
Group Type	Internal	City	Newark
Description	ninja service team	State	NJ
Email	betateam@gmail.com	Zip	
Phone	(987) 654-3211	Country	United States
Is Address Validated	☐	Geo Location	

Location Map
Edit Delete Clone Validate Address Add Technician

Technicians
Technicians Help ?

Action	Technician Name	Active	Business Hours	Break Hours	Employment Status	Enable Scheduling	Fixed Cost	Inventory Location	Per Hour Cost
Edit Del	Anthony Gate	☒	Standard		Full-time	☒			

Dispatcher Access
New Dispatcher Access
Dispatcher Access Help ?

Action	Dispatcher Access Name	Dispatcher	Service Territory
Edit Del	DISP-ACCS-00000003	Damco User	New Jersey Region

Expertise
New Expertise
Expertise Help ?

Action	Expertise Name	Availability End Date	Availability Start Date	Skill	Skill Level	Technician	Last Activity Date
Edit Del	Expertise-00000003	4/20/2018	4/20/2017	Computer Repair	8	Anthony Gate	
Edit Del	Expertise-00000004	4/20/2018	4/20/2017	Troubleshooting	9	Anthony Gate	

Team Labor Cost
New Team Labor Cost
Team Labor Cost Help ?

Action	Team Labor Cost Name	Billable Amount	Cost Category	Hourly Cost	Technician
Edit Del	TEAM-LBR-CST-00000000	\$110.00	Straight	\$11.00	Anthony Gate

Service Locations Covered
New Service Location Covered
Service Locations Covered Help ?

No records to display

5.3 Service Contracts & Warranty Configuration

5.3.1 Warranty Terms

- Warranty Terms are used to create product warranties for different products offered in the service organization. It defines the coverage and effective dates for a given product warranty.
- On clicking 'Warranty Terms' button, the control is redirected to 'Warranty Terms' tab that displays all existing warranty terms. You can also create a new warranty term by clicking 'New Warranty Terms' button and adding more details on warranty term edit page.

Some fields, buttons and related records of Warranty Terms that need special mention:

Applicable Product - Once you have created a warranty term you can link it to a product or a product family or a product line by creating a new 'Applicable Product'.

Product Counters - Product Counter of 'Setup' record type is used to define counter based Warranty coverage for a Product. It tracks warranty coverage for the product from its 'Coverage Effective From' value on the Installed Product.

Warranty Terms Detail		Exclusions	
Warranty Terms Name	50% Coverage Warranty	Invoice Required	☐
Coverage Effective From	MOBSVC_Date_Installed__c	Onsite Repair	☒
Duration of Material Coverage	6	Loaner Provided	☐
Unit of Time for Material Coverage	Months	RMA Required	☐
Material % Covered	50%	Shipment Allowed	☐
Duration of Labor Coverage	6	Transferable	☒
Unit of Time for Labor Coverage	Months	Walk-in Allowed	☒
Labor % Covered	50%		
Duration of Expenses Coverage	6		
Unit of Time for Expenses Coverage	Months		
Expenses % Covered	50%		
Created By	Damco User, 4/20/2017 12:43 AM		
	Last Modified By Damco User, 6/30/2017 3:45 AM		

Applicable Products		New Applicable Product		Applicable Products Help ?	
Action	Applicable Product Name	Product	Product Family	Product Line	
Edit Del	GenWatt Diesel 1000kW - AP	GenWatt Diesel 1000kW			
Edit Del	SLA: Gold - AP	SLA: Gold			

Product Counters		New Product Counters		Product Counters Help ?	
No records to display					

5.3.2 Service Plans

- Service Plans are used as templates for the Service Contracts which are created for different customers and locations. Service plan defines the coverage of service contract, expense pricing, labor pricing, discounts etc.
- On clicking 'Service Plans' button, the control is redirected to 'Service Plans' tab that displays all existing service plans. You can also create a new service plan by clicking 'New Service Plan' button and adding more details on service plan edit Page.

Some fields, buttons and related records of Service Plans that need special mention:

PM Offering - Once a service plan is created you can also define the offerings as part of preventive maintenance plan if bought with the service contract for the associated installed product.

Labor Pricing - Here, you can define labor pricing structure for a service plan associated with a service contract.

Parts Discount - Here, you can define the discounts offered by service plan for one or more products, product family or product line.

Expense Pricing - Here, you can define the pricing model of miscellaneous expenses which may occur while performing a Work Order as part of the Service Contract.

Parts Pricing - Here, you can define the prices of various service parts which could be consumed as part of the Work Order. If not defined, the product prices from the standard price-book would be used.

Service Plan Detail		Edit Delete Clone Create Service Contract	
Service Plan Name	Professional Plan	Minimum Labor (Mins)	300
Active	☒	Minimum Travel (Mins)	450
Description		Default Travel Unit	Tiered Per Mile/Km
Service Pricebook	Service Pricebook A	Default Travel Price	
Parts Pricebook	Standard Price Book		
List Price	\$150		
Created By	Damco User , 4/20/2017 12:52 AM	Last Modified By	Damco User , 6/30/2017 4:31 AM
		Edit Delete Clone Create Service Contract	

PM Offerings	New PM Offering	PM Offerings Help ?
No records to display		

Labor Pricing	New Labor Pricing	Labor Pricing Help ?
No records to display		

Parts Discount	New Parts Discount	Parts Discount Help ?
No records to display		

Expense Pricing	New Expense Pricing	Expense Pricing Help ?
No records to display		

 Parts Pricing	New Parts Pricing	Parts Pricing Help ?
No records to display		

5.3.3 Auto Entitlement Rules

- Auto Entitlement rules can be used to automatically check if a customer is entitled to a Product Warranty or a Service Contract. Auto Entitlement can be performed from Case and/or Work Order.
- While creating an entitlement rule, a 'Rule Sequence' must be provided for prioritizing the rule in case multiple rules with matching criteria are found.
- On clicking 'Auto Entitlement Rules' button, the control is redirected to 'Auto Entitlement Rule' tab that displays all existing rules. You can also create a new rule by clicking 'New Auto Entitlement Rule' button and adding more details on the auto entitlement rule edit page.

Some areas around auto entitlement rule that need special mention:

Entry Criteria - Auto Entitlement can be performed for Case and/or Work Order. Once you select the object, entry criteria for the rule can be specified in the form of advanced expression and entitlement will only be performed on that object record if it satisfies the entry criteria. The advanced expression must be carefully specified as this is validated against a valid SOQL statement for getting the right results.

Mapping Definition - Here, you can define the right pattern for selecting the respective Warranty or Service Contract record when the entitlement check is performed automatically. Carefully select the options specified as per your business process needs.

Auto Entitlement Rules

①

Rule Details	Entry Criteria	Mapping Definition
Auto Entitlement Rule Name: <u>Rule One</u>	Active: ☒	
Description: Auto Entitlement Rule One	Rule Sequence: <u>1</u>	

②

Rule Details	Entry Criteria	Mapping Definition												
Select Object: <u>Work Order</u>														
	<table border="1"> <thead> <tr> <th>Seq#</th> <th>Field</th> <th>Operator</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Order Status</td> <td>Equal</td> <td>'Open' (Use Single Quotes ('string') for text values)</td> </tr> <tr> <td>2</td> <td>Product</td> <td>Not Equals</td> <td>'' (Use Single Quotes ('string') for text values)</td> </tr> </tbody> </table>	Seq#	Field	Operator	Value	1	Order Status	Equal	'Open' (Use Single Quotes ('string') for text values)	2	Product	Not Equals	'' (Use Single Quotes ('string') for text values)	
Seq#	Field	Operator	Value											
1	Order Status	Equal	'Open' (Use Single Quotes ('string') for text values)											
2	Product	Not Equals	'' (Use Single Quotes ('string') for text values)											
Advanced Expression 1 AND 2 Acceptable Formats - 1, (1 AND 2 AND 3), ((1 AND 2) OR (3)), ((1 AND 2) OR (2 AND 3))														

③

Rule Details	Entry Criteria	Mapping Definition
Question		Response
Include the parent installed product of the faulty component in the entitlement check?		No
Include the top-level installed product of the faulty component in the entitlement check?		No
Include associated warranties or service contracts or both for the entitlement check?		Both
Match the Account on the Case/Work Order with the Account on the Service Contract?		Yes
Match the Contact on the Case/Work Order with the contacts entitled in the Service Contract?		N/A
Match the Location on Case/Work Order also for the entitlement check?		N/A
How does the entitlement rule select when multiple warranties and/or service contracts exist?		Pick The First Warranty
Include counters or validity dates or both for searching the warranties and service contracts?		Validity Dates
If the answer to the above question is 'Both', select your preference for processing counters and validity dates.		N/A

5.4 Preventive Maintenance Configuration

5.4.1 Task Templates

- Task Templates are used to define preventive maintenance tasks which must be carried out as part of a Work Order.
- The tasks are automatically added to Work Order when it is created as part of a Preventive Maintenance Plan execution.
- On clicking 'Task Templates' button the control is redirected to 'Task Template' tab that displays all existing task templates. You can also create a new task template by clicking 'New Task Template' button and adding more details on task template edit page.
- Once a task template is created, Task Lines must be added to define the actual work order tasks to be performed along with their sequence of execution, priority, and description.

Task Template Detail		Edit	Delete	Clone
Task Template Name	PM Task Template			
Description	PM Task Template			
Created By	Damco User, 4/20/2017 1:05 AM		Last Modified By	Damco User, 7/3/2017 12:51 AM
		Edit	Delete	Clone

Task Lines		New Task Line	Task Lines Help ?
Action	Task Title	Priority	Sequence
Edit Del	Cleanup	High	1.00
Edit Del	Lubricate	High	2.00
Edit Del	Assemble	High	3.00

5.4.2 PM Plan Templates

- You can define the templates that are used for creating Preventive Maintenance Plans on a Service Contract.
- PM Plan Template defines the coverage, schedule, and service offerings (Tasks Templates) as part of a PM plan.
- On clicking 'PM Plan Templates' button, the control is redirected to 'PM Plan Template' tab that displays all existing PM Plan Templates. You can also create a new PM Plan Template by clicking 'New PM Plan Template' button and adding more details on PM Plan template edit page.
- Once a PM Plan Template is created you can associate it with a product or a product family or a product line by associating it with a PM Applicable Product record.

PM Plan Template Detail
Edit Delete Clone

Information

PM Plan Template Name	PM-PLAN-TEMP-00000000	Active	☒
Coverage Type	Installed Product	Description	

Schedule

Frequency	3	Task Template	PM Task Template
Frequency Unit	Months	Visit Description	
Recurring	☒		
Created By	Damco User, 4/20/2017 1:10 AM		Last Modified By
			Damco User, 7/3/2017 1:35 AM

Edit Delete Clone

PM Applicable Products
New PM Applicable Product
PM Applicable Products Help ?

Action	PM Applicable Product Name	Product	Product Family	Product Line
Edit Del	PM-APPL-PROD-00000000	Installation: Industrial - Medium		
Edit Del	PM-APPL-PROD-00000002	SLA: Gold		
Edit Del	PM-APPL-PROD-00000003	GenWatt Diesel 1000kW		

5.4.3 Schedule PM

- Preventive Maintenance Plans can be scheduled in the system through Schedule PM.
- On clicking 'Schedule PM' you will be redirected to Salesforce Apex Scheduler page where you need to schedule an Apex class to be automatically executed as per the defined schedule. The Class Name to be selected for the schedule is:

"OptimaPro__MOBSVC_PreventiveMaintenance_Scheduler"

- Once scheduled, the Work Order and Cases would be created automatically along with the Preventive Maintenance Work Order Tasks when the schedule criteria are met.

Job Name

Apex Class

Schedule Apex Execution

Frequency
☐ Weekly
 ☒ Monthly

☒ On day of every month
☐ On of every month

Start [7/3/2017]

End [7/3/2017]

Preferred Start Time

Exact start time will depend on job queue activity.

5.5 Work Order Automation Rules

5.5.1 Technician Dispatch Rules

- Technician Dispatch Rules are used to automatically dispatch a Technician for the given Work Order.
- While creating a technician dispatch rule, a 'Rule Sequence' must be provided to prioritize the rule in case multiple rules match the criteria.
- On clicking 'Technician Dispatch Rules' button, the control is redirected to 'Technician Dispatch Rules' tab that displays all existing rules. You can also create a new rule by clicking 'New Technician Dispatch Rule' button and adding more details on Technician Dispatch Rule edit page.

Some areas that need special mention:

Entry Criteria - Entry criteria for the rule can be specified in the form of advanced expression. Auto dispatch will only happen if the work order satisfies the entry criteria. The advanced expression must be carefully specified as this is validated against a valid SOQL statement for getting the right results.

Mapping Definition – Use this tab to select the criteria for finding the right technician for the Work Order. Carefully read and select each option as per the system configuration and other operational parameters.

Damco Solutions Inc.

17

1 Technician Dispatch Rules

Rule Details | Entry Criteria | Mapping Definition

Technician Dispatch Rule Name: Dispatch Rule 1 Active: ☒

Description: Dispatch Rule 1 Rule Sequence: 1 Default Technician: Robert Miller

2

Rule Details | Entry Criteria | Mapping Definition

Seq#	Field	Operator	Value
1	Order Status	Equal	'Open' (Use Single Quotes ('string') for text values)
2	Order Type	Equal	'Field Service' (Use Single Quotes ('string') for text values)

Advanced Expression: 1 AND 2

Acceptable Formats - 1, (1 AND 2 AND 3), ((1 AND 2) OR (3)), ((1 AND 2) OR (2 AND 3))

3

Rule Details | Entry Criteria | Mapping Definition

Sequence	Question	Response
1	Map the skill on Work Order with the Technician skill ?	☒
2	Map the Service Team on Work Order with the Service Team of Technician ?	☒
3	Map the Service Territory on Work Order with the Service Territory of Technician ?	☐
4	Map the Skill on Work order with the Technician Team Skill ?	☐
5	Match the Preferred Technician on Location for assignment ?	☐
6	Use the Preferred Technician on Account for assignment ?	☐
7	Use the closest Technician for Work Order assignment ?	☐
8	Find a Technician with the matching business hours of Location ?	☐
9	Find a Technician with the matching business hours of Account ?	☐
10	Find a Technician with the lowest per hour cost ?	☐
11	Assign Technicians with their own Inventory Locations ?	☐
12	Find Technicians who are permanent employees only ?	☐
13	Find Full-Time Technicians only ?	☒
14	Find Part-Time Technicians only ?	☐
15	Do Not allow multiple Work Orders to be Assigned to one Technician at the same time ?	☐

5.5.2 Proforma Invoice Rules

- Here, you can define the rules to generate proforma invoices for the work performed under a service contract/warranty or in general.
- While creating a new proforma invoice rule a 'Rule Sequence' must be provided for prioritizing the rule in case multiple rules match the criteria.
- On clicking 'Proforma Invoice Rules' button the control is redirected to the 'Proforma Invoice Rules' tab that displays all existing Proforma Invoice Rules. You can also create a new Proforma Invoice Rule by clicking 'New Proforma Invoice Rule' button and adding more details on Proforma Invoice Rule edit page.

Note: There must be at least one Proforma Invoice rule specified in the system for generating correct Proforma Invoices on Work Order.

Some areas that need special mention:

Include Actual Costs – Use this option to generate Proforma Invoice only using actual costs.

Include Non-Billable Lines – Use this option to include Non-Billable lines as well in your Proforma Invoice.

Entry Criteria - Entry criteria for the rule can be specified in the form of advanced expression and will be respected when generating the Proforma Invoices for the work Order matching the criteria. The advanced expression must be carefully specified as this is validated against a valid SOQL statement for getting the right results.

Proforma Invoice Rules

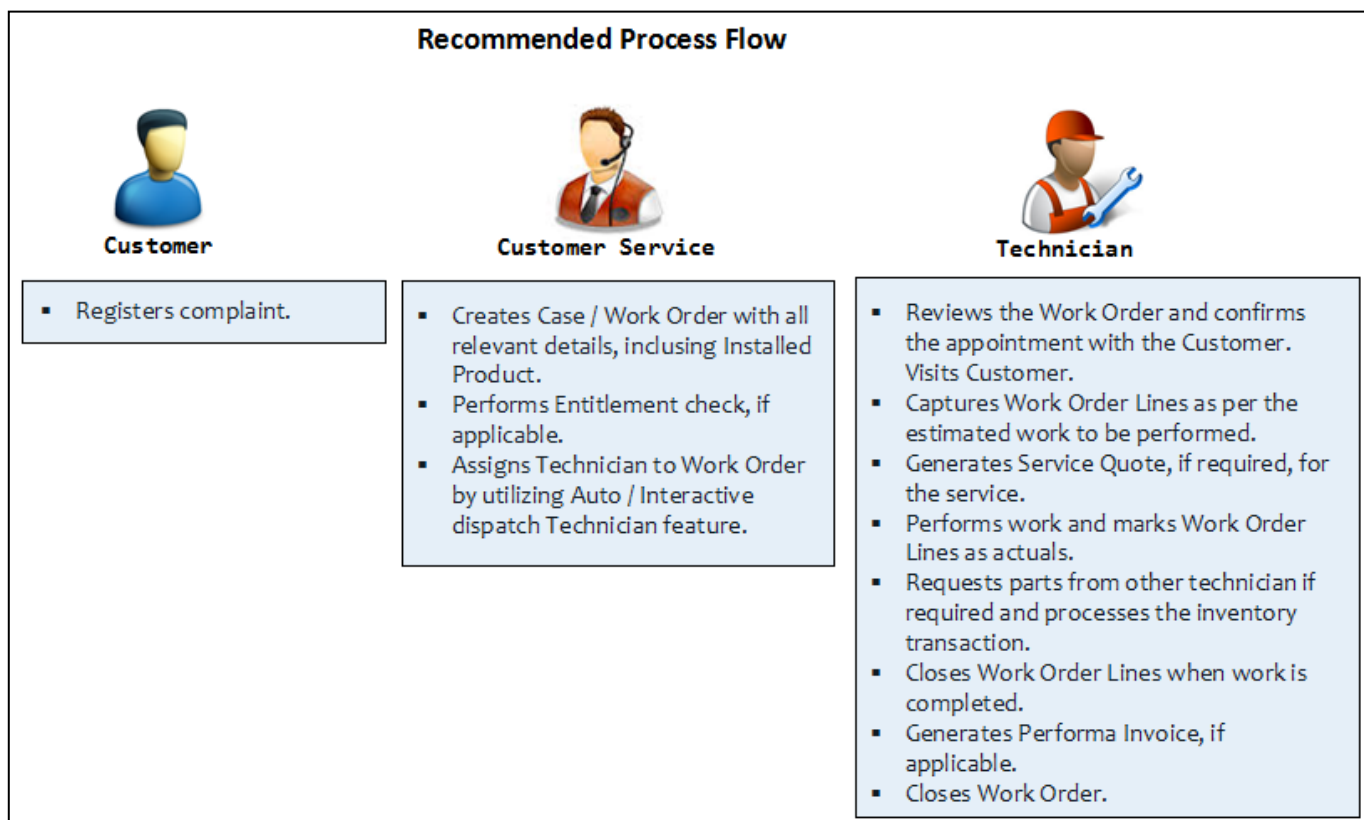
1

Rule Details		Entry Criteria	
Proforma Invoice Rule Name	Billable Rule	Active	☒
Description		Rule Sequence	1
Include Actual Costs	☒	Include Non-Billable Lines	☒

2

Rule Details		Entry Criteria	
Seq#	Field	Operator	Value
1	Invoice Created	Equal	TRUE (Use Single Quotes for text values)
			
Advanced Expression 1			
Acceptable Formats - 1, (1 AND 2 AND 3), ((1 AND 2) OR (3)), ((1 AND 2) OR (2 AND 3))			

6. Optima Pro - End User Guide



6.1 Account

- The account is a standard feature provided in Salesforce. Accounts can be customers, partners, suppliers, and service providers for the organization.
- For each account, related information can be tracked such as installed products, service contracts, work orders, service activities, cases reported etc.

On the Account Detail page, users can use the functionality offered by the custom buttons present, such as:

Validate Address - It allows the auto population of the 'Geo-Location' value on the basis of the 'Billing Address' on the Account. If the address is invalid, an error message is displayed. The location can be viewed on the 'Location Map' section that uses the co-ordinates of the Geo-location value.

Create Installed Product - It allows the creation of installed product corresponding to the Account for the selected product. The information about products installed can be tracked/edited from the related list on the account.

Create Service Contract - It's a service agreement that documents the details of entitlement provided to a customer for the products purchased. The information about service contract can be tracked/edited from the related list on the account.

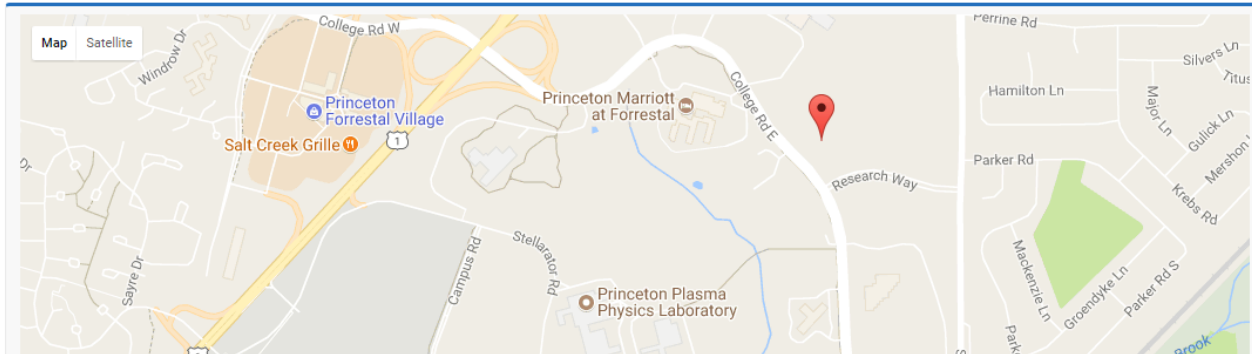
Account Detail
Edit Delete Clean Include Offline Validate Address Create Installed Product Create Service Contract

Account Owner	Damco User [Change]	Account Record Type	Business Account [Change]
Account Name	Damco Solutions [View Hierarchy]	Active	Yes
Parent Account		Phone	
Account Number		Website	
Type	Customer - Direct	Business Hours	Default

▼ Address Information

Billing Address	2 Research Way Princeton, NJ 08540 USA	Shipping Address	
Is Address Validated	☒	Geo Location	40.35452069999999 -74.5944344

▼ Location Map



► Additional Information

► System Information
Edit Delete Clean Include Offline Validate Address Create Installed Product Create Service Contract

Contacts
New Contact Merge Contacts
Contacts Help

Action	Contact Name	Title	Email	Phone
Edit Del	William Hill	Manager	william.hill@damcogroup.com	

Locations
New Location
Locations Help

Action	Location Name	City	Access Hours	Is Receiving Location	Is Repair Location	Is Staging Location	Stocking Location	Primary Contact
Edit Del	NJ, Princeton	Princeton		☐	☐	☐	☐	

Installed Products
Installed Products Help

Action	Installed Product Name	Auto Entitle?	Date Installed	Installation Notes	Location	Preferred Technician	Product	Serial/Lot Number	Status
Edit Del	GenWatt Diesel 1000kW	☐	7/3/2017		NJ, Princeton		GenWatt Diesel 1000kW		Installed

Service Contracts
Service Contracts Help

Action	Service Contract Name	Active	Contract Price	Start Date	End Date
Edit Del	SVC-CNTRCT-00000001	☒	\$165	7/3/2018	7/2/2019

6.2 Contact

Contacts are individuals associated with the accounts. It stores information about the contact like phone numbers, addresses etc. For each contact, related information can be tracked/edited such as cases reported, service activities created, Campaigns involved in etc.

Contact Detail		Edit Delete Clone	
Contact Owner	 Damco User [Change]	Phone	(995) 432-6179
Name	William Hill	Mobile	(987) 654-3210
Account Name	Damco Solutions	Fax	
Title	Manager	Email	william.hill@damcogroup.com
Lead Source	Web	Birthdate	7/16/1981
▼ Address Information			
Mailing Address	2 Research Way Princeton, NJ 08540 USA		Other Address

6.3 Location

- Location stores the physical location information of the Account. An account may have one or more physical locations.
- For each location, related information can be tracked such as Work Orders, Installed Products, PM Plans, Activities, etc.

On the Location detail page, users can use the functionality offered by the custom buttons present, such as:

Validate Address - It allows auto population of the 'Geo-Location' value on the basis of the address filled in the Address Information section. If the address is invalid, an error message is displayed. The location can be viewed on the 'Location Map' section that uses the co-ordinates of the Geo-location value.

Create Installed Product - It allows the creation of installed product corresponding to the Account's physical location. The information about the products installed can be tracked/edited from the related list of the Location.

Location Detail
[Edit](#)
[Delete](#)
[Clone](#)
[Validate Address](#)
[Create Installed Product](#)

Location Name	NJ, Princeton	Owner	Damco User [Change]
Parent		Record Type	Customer [Change]
Account	Damco Solutions	Is Repair Location	☐
Primary Contact	William Hill	Preferred Technician	
Access Hours			

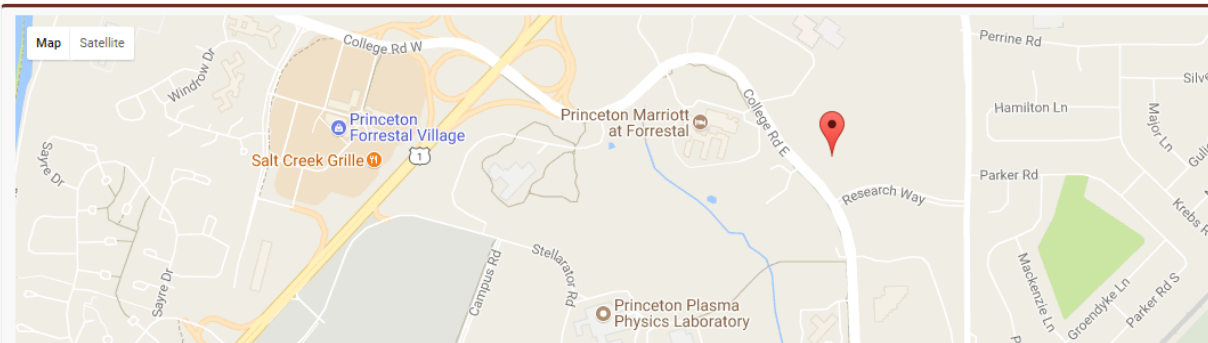
▼ Contact Information

Site Fax	Web site
Site Phone	Email

▼ Address Information

Street	2 Research Way	Is Address Validated	☒
City	Princeton	Geo Location	40.35452069999999 -74.5944344
State	NJ		
Zip	08540		
Country	United States		

▼ Location Map



▼ System Information

Created By	Damco User , 7/3/2017 1:51 AM	Last Modified By	Damco User , 7/4/2017 12:28 AM
------------	---	------------------	--

[Edit](#)
[Delete](#)
[Clone](#)
[Validate Address](#)
[Create Installed Product](#)


Installed Products
[Installed Products Help ?](#)

Action	Installed Product Name	Installation Notes	Product	Serial/Lot Number
Edit Del	GenWatt Diesel 1000kW		GenWatt Diesel 1000kW	DS-GWD0717
Edit Del	SLA: Gold		SLA: Gold	DS-SLAG0717

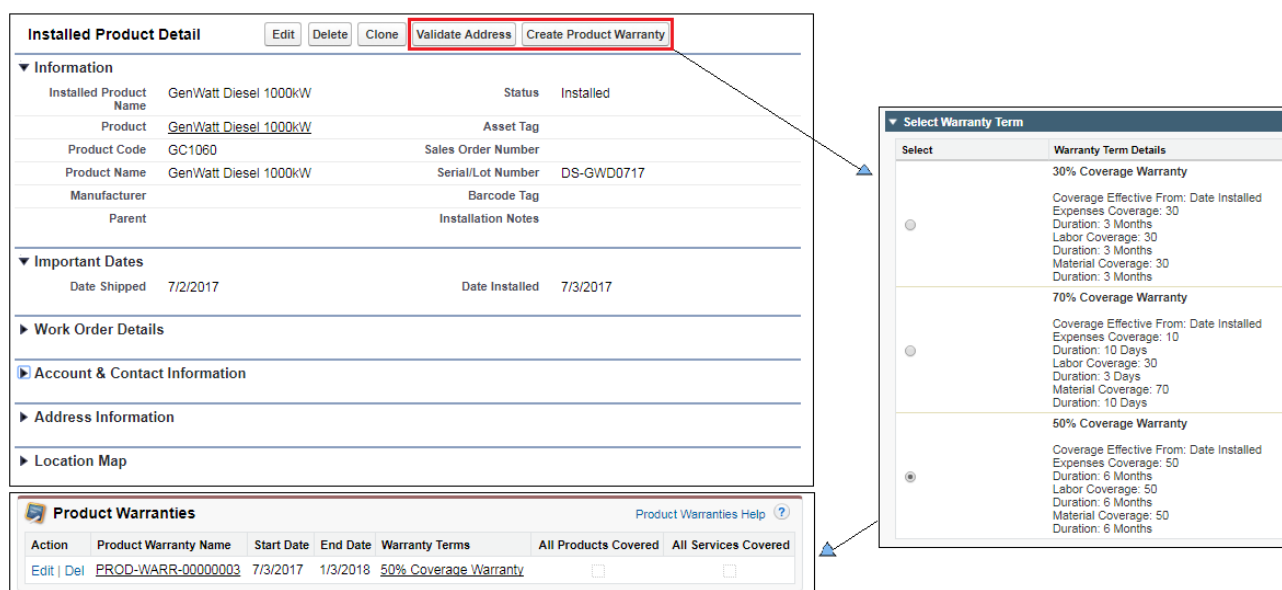
6.4 Installed Product

- Installed Product refers to the product delivered/ installed at the customer's location. Each Installed Product can be tracked through Serial/ Lot number.
- For each Installed Product, related information can be tracked such as Product Warranty, Cases, and Work Orders, etc.

On the Installed Product detail page, users can use the functionality offered by the custom buttons present, such as:

Validate Address - It allows auto population of the 'Geo-Location' value on the basis of the address filled in the Address Information section. If the address is invalid, an error message is displayed. The location can be viewed on the 'Location Map' section that uses the co-ordinates of the Geo-location value.

Create Product Warranty - On clicking 'Create Product Warranty', user is redirected to a page that shows the grid of the Warranty Terms present in the system which are either not linked to any applicable product or are linked to the product referenced in the installed product record. On selecting the desired Warranty Term, a Product Warranty record corresponding to the product installed is created. The Product Warranty created can be tracked/edited from the related list of the Installed Product.



Installed Product Detail [Edit] [Delete] [Clone] [Validate Address] [Create Product Warranty]

Information

Installed Product Name	GenWatt Diesel 1000kW	Status	Installed
Product	GenWatt Diesel 1000kW	Asset Tag	
Product Code	GC1060	Sales Order Number	
Product Name	GenWatt Diesel 1000kW	Serial/Lot Number	DS-GWD0717
Manufacturer		Barcode Tag	
Parent		Installation Notes	

Important Dates

Date Shipped	7/2/2017	Date Installed	7/3/2017
--------------	----------	----------------	----------

Work Order Details

Account & Contact Information

Address Information

Location Map

Product Warranties [Product Warranties Help ?]

Action	Product Warranty Name	Start Date	End Date	Warranty Terms	All Products Covered	All Services Covered
[Edit] [Del]	PROD-WARR-00000003	7/3/2017	1/3/2018	50% Coverage Warranty	☐	☐

Select Warranty Term

Select	Warranty Term Details
☐	30% Coverage Warranty Coverage Effective From: Date Installed Expenses Coverage: 30 Duration: 3 Months Labor Coverage: 30 Duration: 3 Months Material Coverage: 30 Duration: 3 Months
☐	70% Coverage Warranty Coverage Effective From: Date Installed Expenses Coverage: 10 Duration: 10 Days Labor Coverage: 30 Duration: 3 Days Material Coverage: 70 Duration: 10 Days
☒	50% Coverage Warranty Coverage Effective From: Date Installed Expenses Coverage: 50 Duration: 6 Months Labor Coverage: 50 Duration: 6 Months Material Coverage: 50 Duration: 6 Months

6.5 Product Warranty

- Product Warranty refers to the Warranty defined for a particular Installed Product. With every Product Warranty, a Warranty Term is associated.
- For each Product Warranty, the related information about the Work Orders and Cases can be tracked.
- Warranty Terms are warranty coverage details for a particular product or in general by an organization. It contains coverage for parts, labor, and expenses. A Warranty Term can cover multiple Products, Product Families or Product Lines as specified in the Applicable Products.
- Warranty Term has 'Coverage Effective From' value that identifies how to calculate the warranty start date for installed products; on the basis of Date Installed, Date Shipped of Installed Product or Warranty Start Date.
- When Applicable Product is defined for a Warranty Term and an Installed Product is created after that, then a Product Warranty record is automatically created after the creation of the Installed Product.

Product Warranty Detail
[Edit](#)
[Delete](#)
[Clone](#)

Product Warranty Name: PROD-WARR-00000003

All Products Covered ☐

 Installed Product: GenWatt Diesel 1000kW

All Services Covered ☐

Warranty Terms: 50% Coverage Warranty

Start Date: 7/3/2017

End Date: 1/3/2018

End Date Time Covered: 1/3/2018

End Date Material Covered: 1/3/2018

End Date Expenses Covered: 1/3/2018

Created By: Damco User, 7/3/2017 11:48 PM

Last Modified By: Damco User, 7/3/2017 11:48 PM

[Edit](#)
[Delete](#)
[Clone](#)

Work Orders
[New Work Order](#)
[Work Orders Help ?](#)

No records to display

Cases
[New Case](#)
[Cases Help ?](#)

No records to display

Warranty Terms Detail
[Edit](#)
[Delete](#)
[Clone](#)

Warranty Terms Name: 50% Coverage Warranty

Exclusions: 50% Coverage Warranty for 6 Months

Coverage Effective From: MOBSVC_Date_Installed__c

Invoice Required ☐

Duration of Material Coverage: 6

Unit of Time for Material Coverage: Months

Material % Covered: 50%

Duration of Labor Coverage: 6

Unit of Time for Labor Coverage: Months

Labor % Covered: 50%

Duration of Expenses Coverage: 6

Unit of Time for Expenses Coverage: Months

Expenses % Covered: 50%

Created By: Damco User, 4/20/2017 12:43 AM

Last Modified By: Damco User, 6/30/2017 3:45 AM

[Edit](#)
[Delete](#)
[Clone](#)

Applicable Products
[New Applicable Product](#)
[Applicable Products Help ?](#)

Action	Applicable Product Name	Product	Product Family	Product Line
Edit Del	GenWatt Diesel 1000kW - AP	GenWatt Diesel 1000kW		
Edit Del	SLA: Gold - AP	SLA: Gold		

6.6 Service Contract

- Service Contract is a service agreement that documents the details of entitlement(s) provided to a customer for the products purchased.
- Users can specify the details of the contract when it is created, like the coverage details, start date, end date.
- Users have the option to override the Covered Locations, Products, Contacts and other details at the Service Contract level which were defined at the Service Plan level.
- Users can also specify the Preventive Maintenance plans which are included as part of the Service Contract, as well as the Product Counters.

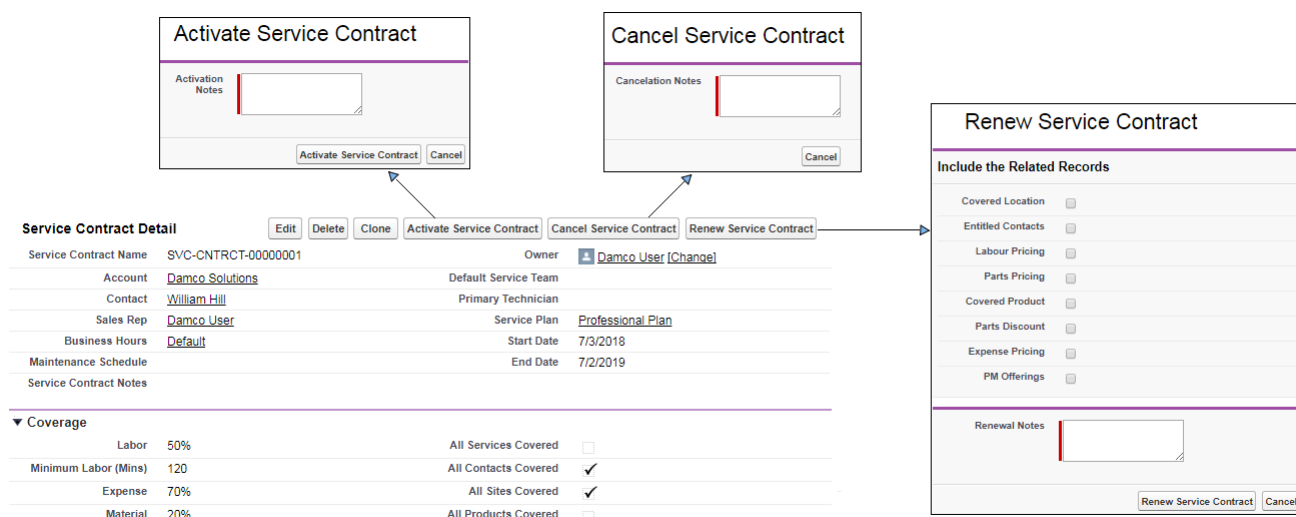
On the Service Contract detail page, users can use the functionality offered by the custom buttons present, such as:

Activate Service Contract - It allows the activation of service contract in order to make it available for use. On clicking 'Activate Service Contract' button, the user is redirected to a page to fill the activation notes that are populated against 'Activation Notes' value on Service Contract. Upon successful activation, the name of the user and date value gets stamped on the Service Contract.

Renew Service Contract - On clicking 'Renew Service Contract' button, a new Service Contract is created and the user is redirected to select the related records from the existing Service Contract that are required to be carried over to the new Service Contract, along with 'Renewal Notes'.

The renewed Service Contract has 'Renewed From' that allows to track the original Service Contract along with the renewal date.

Cancel Service Contract - It allows immediate cancellation of a Service Contract. On clicking 'Cancel Service Contract' button, the user is redirected to fill the cancellation notes that are populated against the 'Cancellation Notes' value on Service Contract. Upon cancellation, the name of the user and date value gets stamped on the Service Contract.



The screenshot displays the 'Service Contract Detail' page for contract SVC-CNTRCT-00000001. It includes fields for Account (Damco Solutions), Contact (William Hill), Sales Rep (Damco User), Business Hours (Default), Maintenance Schedule, and Service Plan (Professional Plan). The Start Date is 7/3/2018 and the End Date is 7/2/2019. The Owner is Damco User. Below this, a 'Coverage' section lists Labor (50%), Minimum Labor (120), Expense (70%), and Material (20%). To the right, there are checkboxes for 'All Services Covered', 'All Contacts Covered' (checked), 'All Sites Covered' (checked), and 'All Products Covered'. At the top, there are three modal windows: 'Activate Service Contract' with an 'Activation Notes' field, 'Cancel Service Contract' with a 'Cancellation Notes' field, and 'Renew Service Contract' with a 'Renewal Notes' field and a list of related records including Covered Location, Entitled Contacts, Labour Pricing, Parts Pricing, Covered Product, Parts Discount, Expense Pricing, and PM Offerings. Arrows indicate that the 'Activate Service Contract', 'Cancel Service Contract', and 'Renew Service Contract' buttons on the main page lead to their respective modal windows.

6.7 Case

- Cases contain the detailed description of a customer's problem/ feedback. This information is used to track and solve the issues.
- For each case, related information can be created and tracked such as Work Orders, Parts Orders, etc.

On Case detail page, the user can use the functionality offered by the custom buttons present, such as:

Validate Address – It allows auto population of the 'Geo-Location' value on the basis of the address filled in the 'Address Information' section. If the address is invalid, an error message is displayed. The location can be viewed on the 'Location Map' section that uses the co-ordinates of the Geo-location value.

Check Entitlement – It refers to the entitlement of a customer to a product warranty or a service contract. On clicking this button, the user is redirected to a page to select the following types of entitlement checks to be performed:

Auto Entitlement – This allows automatic entitlement to either product warranty or service contract as per the auto entitlement rules configured in the system.

If the Case meets the predefined criteria, automatic checking of existing entitlements is done and appropriate entitlement (service contract or warranty) is updated for the corresponding Case.

After the Auto Entitlement is performed, values under 'Entitlement Information' section on the Case get refreshed as following:

- Entitlement Type as 'Auto'
- Auto Entitlement Status as 'Success'
- Either of Warranty or Service Contract gets updated.

Case Detail
Edit Delete Close Case Clone Validate Address Check Entitlement

▼ Case Information

Case Number	00001028 [View Hierarchy]	Subject	DS - Customer Complaint
Case Owner	Damco User [Change]	Description	
Type	Mechanical	Status	Working
Parent Case		Priority	Medium
Case Reason	Performance	Case Origin	Phone
Escalated	☐	Priority Flag	
Scheduled Date	7/5/2017	Work Order Type	Field Service
Preferred Start Time	7/5/2017 3:17 AM	Preferred Technician	

▼ Product & Address Information

Product/System	GenWatt Diesel 1000kW	Component Street	2 Research Way
Component Name	GenWatt Diesel 1000kW	Component City	Princeton
Component	GenWatt Diesel 1000kW	Component State	NJ
Location	NJ, Princeton	Component Zip	08540
Is Address Validated	☒	Component Country	United States
Geo Location		Country Code	United States

▼ Entitlement Information

Warranty	PROD-WARR-00000003	Is Entitlement Performed	☒
Service/Maintenance Contract		Entitlement Type	AUTO
Service Contract Flag		Auto Entitlement Status	Success
Is PM Case	☐	Entitlement Notes	50% Coverage Warranty for 6 Months
Preventive Maintenance Plan		Is Service Covered	☐

Check Entitlement

Entitlement Check Type
☒ Auto
☐ Interactive

Continue Cancel

An error message is displayed if there exists no matching rule in the system or if the auto entitlement has already been performed.

Check Entitlement

Error:
 It appears that the Entitlement Check has already been performed on this record.

Entitlement Check Type
☒ Auto
☐ Interactive

Continue Cancel

Interactive Entitlement – This allows entitlement to the available product warranty or service contract records as per the user selection.

On selecting 'Interactive Entitlement', the user is redirected to a page that displays the details of Product Warranties and Service Contracts available in the system, corresponding to the Installed Product selected on the Case.

After the Interactive Entitlement is performed, values under 'Entitlement Information' section on the Case get refreshed as following:

- Entitlement Type equals 'Interactive'
- Auto Entitlement Status equals 'Success'
- Either of Warranty or Service Contract, as selected, gets updated

Case Detail

Edit
Delete
Close Case
Clone
Validate Address
Check Entitlement

▼ Case Information

Case Number	00001028 View Hierarchy	Subject	DS - Customer Complaint
Case Owner	Damco User (Change)	Description	
Type	Mechanical	Status	Working
Parent Case		Priority	Medium
Case Reason	Performance	Case Origin	Phone
Escalated	☐	Priority Flag	
Scheduled Date	7/5/2017	Work Order Type	Field Service
Preferred Start Time	7/5/2017 3:17 AM	Preferred Technician	

▼ Product & Address Information

Product/System	GenWatt Diesel 1000kW	Component Street	2 Research Way
Component Name	GenWatt Diesel 1000kW	Component City	Princeton
Component	GenWatt Diesel 1000kW	Component State	NJ
Location	NJ, Princeton	Component Zip	08540
Is Address Validated	☒	Component Country	United States
Geo Location		Country Code	United States

▼ Entitlement Information

Warranty	PROD-WARR-00000003	Is Entitlement Performed	☒
Service/Maintenance Contract		Entitlement Type	INTERACTIVE
Service Contract Flag		Auto Entitlement Status	Success
Is PM Case	☐	Entitlement Notes	50% Coverage Warranty for 6 Months
Preventive Maintenance Plan		Is Service Covered	☐

Check Entitlement

Entitlement Check Type
☐ Auto
☒ Interactive

Continue

Cancel

Interactive Entitlement Check

Product Warranties

Select
 Product Warranty Details
 PROD-WARR-00000003
 Start Date: Mon Jul 03 00:00:00 GMT 2017
 End Date: Wed Jan 03 00:00:00 GMT 2018
 Warranty Terms: 50% Coverage Warranty
 All Products Covered: false
 All Services Covered: false
 End Date Labour Covered: Wed Jan 03 00:00:00 GMT 2018
 End Date Material Covered: Wed Jan 03 00:00:00 GMT 2018
 End Date Expenses Covered: Wed Jan 03 00:00:00 GMT 2018
 Warranty Notes: 50% Coverage Warranty for 6 Months

Service Contracts

Select
 Service Contract Details

Update Entitlement

Cancel

An error message is displayed if there doesn't exist any product warranty or service contract corresponding to the installed product on the case, or if interactive entitlement has already been performed.

Check Entitlement

Error:
 It appears that the Entitlement Check has already been performed on this record.

Entitlement Check Type
☐ Auto
☒ Interactive

Continue

Cancel

6.8 Work Order

- Work Orders are used to manage the entire field service process to perform a field service job which may or may not be related to a Case.
- Work Orders of two types are currently supported: Field Service and Carry In.
- Work Orders are used to track the requested and received parts, work order lines, create quotes and send invoices, check entitlement etc.

On the Work Order detail page, certain functionality is provided by the custom buttons present, such as:

Validate Address – It allows auto population of the 'Geo-Location' value on the basis of the address filled in the 'Location Information' section. If the address is invalid, an error message is displayed. The location can be viewed on the 'Location Map' section that uses the coordinates of the Geo-location value.

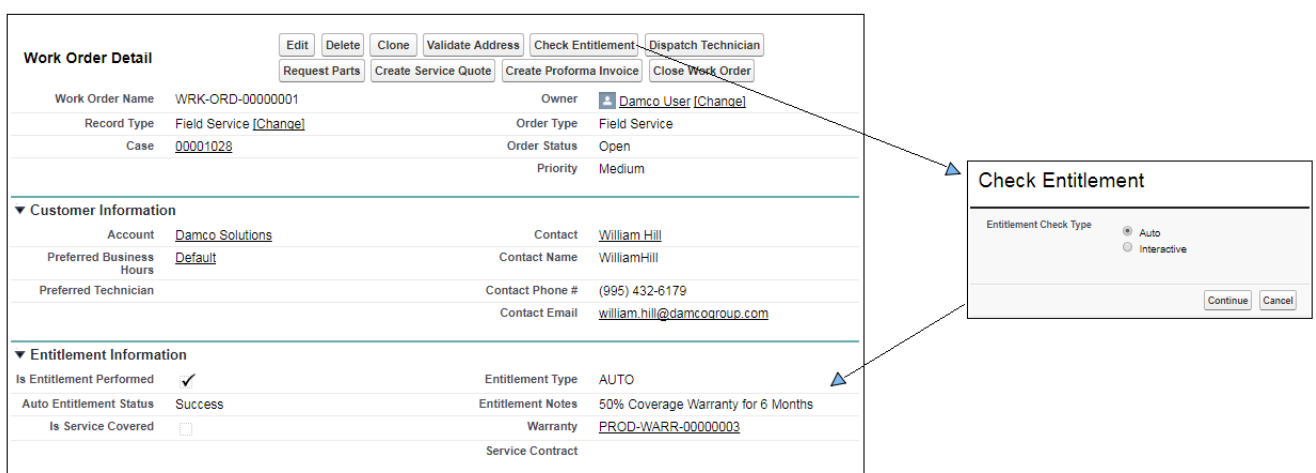
Check Entitlement – It refers to the entitlement of a customer to a product warranty or a service contract. On clicking this button, the user is redirected to a page to select the following types of entitlement checks to be performed:

Auto Entitlement – This allows automatic entitlement to either product warranty or service contract as per the auto entitlement rules configured in the system.

If the Work Order meets the predefined criteria, automatic checking of existing entitlements is done and appropriate entitlement (service contract or warranty) is updated for the corresponding Work Order.

After the Auto Entitlement is performed, values under 'Entitlement Information' section on the Work Order get refreshed as following:

- Entitlement Type as 'Auto'
- Auto Entitlement Status as 'Success'
- Either of Warranty or Service Contract gets updated.



Work Order Detail	
Work Order Name	WRK-ORD-00000001
Record Type	Field Service [Change]
Case	00001028
Owner	Damco User [Change]
Order Type	Field Service
Order Status	Open
Priority	Medium
▼ Customer Information	
Account	Damco Solutions
Preferred Business Hours	Default
Preferred Technician	
Contact	William Hill
Contact Name	William Hill
Contact Phone #	(995) 432-6179
Contact Email	william.hill@damcogroup.com
▼ Entitlement Information	
Is Entitlement Performed	✓
Auto Entitlement Status	Success
Is Service Covered	☐
Entitlement Type	AUTO
Entitlement Notes	50% Coverage Warranty for 6 Months
Warranty	PROD-WARR-00000003
Service Contract	

Check Entitlement
 Entitlement Check Type
☒ Auto
☐ Interactive
 Continue Cancel

An error message is displayed if there exists no matching rule in the system or if the auto entitlement has already been performed, as shown in Case.

Interactive Entitlement – This allows entitlement to the available product warranty or service contract records as per the user selection.

On selecting 'Interactive Entitlement', the user is redirected to a page that displays the details of Product Warranties and Service Contracts available in the system, corresponding to the Installed Product selected on the Work Order.

After the Interactive Entitlement is performed, values under 'Entitlement Information' section on the Work Order get refreshed as following:

- Entitlement Type equals 'Interactive'
- Auto Entitlement Status equals 'Success'
- Either of Warranty or Service Contract, as selected, gets updated

Work Order Detail

Edit Delete Clone Validate Address Check Entitlement Dispatch Technician	
Request Parts Create Service Quote Create Proforma Invoice Close Work Order	
Work Order Name	WRK-ORD-00000001
Record Type	Field Service [Change]
Case	00001028
Owner	Damco User [Change]
Order Type	Field Service
Order Status	Open
Priority	Medium

▼ Customer Information

Account	Damco Solutions	Contact	William Hill
Preferred Business Hours	Default	Contact Name	WilliamHill
Preferred Technician		Contact Phone #	(995) 432-6179
		Contact Email	william.hill@damcogroup.com

▼ Entitlement Information

Is Entitlement Performed	☒	Entitlement Type	INTERACTIVE
Auto Entitlement Status	Success	Entitlement Notes	50% Coverage Warranty for 6 Months
Is Service Covered	☐	Warranty	PROD-WARR-00000003
		Service Contract	

Check Entitlement

Entitlement Check Type	☐ Auto ☒ Interactive
Continue Cancel	

Interactive Entitlement Check

Product Warranties

Select	Product Warranty Details
	PROD-WARR-00000003 Start Date: Mon Jul 03 00:00:00 GMT 2017 End Date: Wed Jan 03 00:00:00 GMT 2018 Warranty Terms: 50% Coverage Warranty All Products Covered: false All Services Covered: false End Date Labour Covered: Wed Jan 03 00:00:00 GMT 2018 End Date Material Covered: Wed Jan 03 00:00:00 GMT 2018 End Date Expenses Covered: Wed Jan 03 00:00:00 GMT 2018 Warranty Notes: 50% Coverage Warranty for 6 Months

Service Contracts

Select	Service Contract Details
Update Entitlement Cancel	

An error message is displayed if there doesn't exist any product warranty or service contract corresponding to the installed product on the case, or if interactive entitlement has already been performed, as shown in Case.

Dispatch Technician – It allows the dispatch of Technician for the selected Work Order. On clicking the 'Dispatch Technician' button, the user is redirected to a page to select the type of dispatch process to be followed, such as:

Auto Dispatch – This allows the automatic dispatch of the Technician to the Work Order.

For this, the Work Order needs to meet any one of the Technician Dispatch Rules as configured in the system.

Once the Auto Dispatch is performed, following values under 'Dispatch Information' section on the Work Order get refreshed:

- Technician
- Assigned Date Time
- Dispatch Status equals 'Assigned'

Work Order Detail

[Edit](#)
[Delete](#)
[Clone](#)
[Validate Address](#)
[Check Entitlement](#)
[Dispatch Technician](#)

[Request Parts](#)
[Create Service Quote](#)
[Create Proforma Invoice](#)
[Close Work Order](#)

Work Order Name

WRK-ORD-00000001

Record Type

Field Service [\[Change\]](#)

Case

00001028

Owner

[Damco User \[Change\]](#)

Order Type

Field Service

Order Status

Open

Priority

Medium

▼ Customer Information

Account

[Damco Solutions](#)

Preferred Business Hours

[Default](#)

Preferred Technician

Contact

[William Hill](#)

Contact Name

William Hill

Contact Phone #

(995) 432-6179

Contact Email

[william.hill@damcogroup.com](#)

▼ Entitlement Information

Is Entitlement Performed

☒

Auto Entitlement Status

Success

Is Service Covered

☐

Entitlement Type

INTERACTIVE

Entitlement Notes

50% Coverage Warranty for 6 Months

Warranty

[PROD-WARR-00000003](#)

Service Contract

▼ Dispatch Information

Dispatch Status

Assigned

Assigned Date Time

7/6/2017 1:12 AM

Dispatch Now

Dispatch Response

Qualified Technicians

Special Instructions

Primary Service Territory

[New Jersey Region](#)

Service Team

[Ninja Team](#)

Technician

[Anthony Gate](#)

Skill

[Troubleshooting](#)

Skill Set

Customer Down

☐

Dispatch Technician

Dispatch Technician Type

☒ Auto
 ☐ Interactive

[Continue](#)
[Cancel](#)

An error message is displayed if the technician is already assigned to the Work Order.

Dispatch Technician


Error:
 It appears that a Technician is already assigned to this Work Order.

Dispatch Technician Type

☒ Auto
 ☐ Interactive

[Continue](#)
[Cancel](#)

Interactive Dispatch – It allows the dispatch of the technician as per the Service Territory, Service Team and desired skill of the technician chosen on the Work Order.

For interactive dispatch to perform the dispatch of technician, the current logged in user must have a record under Dispatcher Access section of either the Service Territory or the Service Team, as chosen on the Work Order.

Service Team

Ninja Team

Dispatcher Access

[New Dispatcher Access](#)

Action	Dispatcher Access Name	Dispatcher	Service Territory
Edit Del	DISP-ACCS-00000003	Damco User	New Jersey Region

OR

Service Territory

New Jersey Region

Dispatcher Access

[New Dispatcher Access](#)

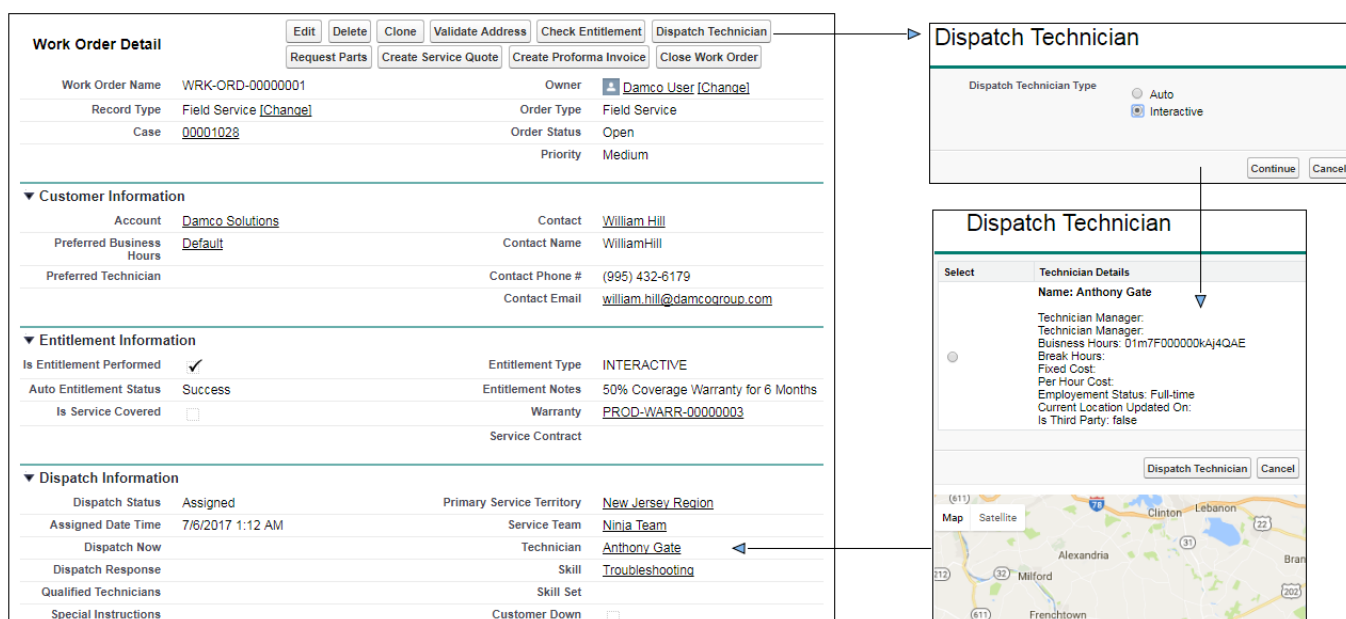
Action	Dispatcher Access Name	Dispatcher	Service Team
Edit Del	DISP-ACCS-00000003	Damco User	Ninja Team

On selecting 'Interactive Dispatch', user is redirected to a page that displays the grid of the Technicians and their details that are suitable to be dispatched for the Work Order.

The updated location of the technicians can be viewed on Map, on the same page.

Once the Auto Dispatch is performed, following values under 'Dispatch Information' section on the Work Order get refreshed:

- Technician
- Assigned Date Time
- Dispatch Status equals 'Assigned'



Work Order Detail

Work Order Name: WRK-ORD-00000001
 Record Type: Field Service [Change]
 Case: 00001028
 Owner: Damco User [Change]
 Order Type: Field Service
 Order Status: Open
 Priority: Medium

Customer Information

Account: Damco Solutions
 Preferred Business Hours: Default
 Preferred Technician: [Change]
 Contact: William Hill
 Contact Name: William Hill
 Contact Phone #: (995) 432-6179
 Contact Email: william.hill@damcogroup.com

Entitlement Information

Is Entitlement Performed: ☒
 Auto Entitlement Status: Success
 Is Service Covered: ☐
 Entitlement Type: INTERACTIVE
 Entitlement Notes: 50% Coverage Warranty for 6 Months
 Warranty: PROD-WARR-00000003
 Service Contract: [Change]

Dispatch Information

Dispatch Status: Assigned
 Assigned Date Time: 7/6/2017 1:12 AM
 Primary Service Territory: New Jersey Region
 Service Team: Ninja Team
 Technician: Anthony Gate
 Skill: Troubleshooting
 Dispatch Now
 Dispatch Response
 Qualified Technicians
 Special Instructions
 Customer Down: ☐

Dispatch Technician

Dispatch Technician Type: ☐ Auto ☒ Interactive

Dispatch Technician

Select Technician Details

Name: Anthony Gate
 Technician Manager:
 Business Hours: D1m7F000000kA4QAE
 Break Hours:
 Fixed Cost:
 Per Hour Cost:
 Employment Status: Full-time
 Current Location Updated On:
 Is Third Party: false

Dispatch Technician Cancel

Map Satellite

Lebanon
 Clinton
 Alexandria
 Milford
 Frenchtown

An error message is displayed if the technician is already assigned to the Work Order.



Dispatch Technician

Error:
 A Technician is already Assigned to this Work Order.

Select Technician Details

Dispatch Technician Cancel

Request Parts – This allows Technician in service to check the availability and request the stock to the desired location.

- On clicking 'Request Parts' button on Work Order, the user is redirected to a page to fill in the required quantity at the desired location, which could either be the work order location or the technician inventory location or any other location, and search for the availability of the stock.
- Depending on the search criteria, the available stock list appears on the screen.

- The user can select from the available options, based on the location. The location of the product stock can also be viewed on the 'Location Map' below.
- Once the stock has been ordered, a 'Work Order Line' record of Request/Receipt type gets created automatically on the Work Order. The user can edit the details if required.

Request/Order Parts

Search Criteria

Product: 

To Location: ▼

Required Date: [7/6/2017]

Required Quantity:

Available Stock

Select	Location Details
☐	NJ, Newark Stock Status: Available Available Quantity: 10000 Is Partner: false Partner Account: Partner Contact: Distance: 7357.37 Product Cost:
☐	NJ, Jersey City Stock Status: Available Available Quantity: 2500 Is Partner: false Partner Account: Partner Contact: Distance: 0 Product Cost:

- If the search criteria show no results (i.e. Stock is not available), an error message displays prompting the user to order the desired stock by clicking on 'Order Parts' button.
- On clicking this button, a 'Parts Order' and 'Parts Order Line' is created for the required Product on the Work Order. User can track/edit the order being done.

Request/Order Parts	
Search Criteria	
Product	GenWatt Diesel 1000kW
To Location	Work Order Location ▼
Required Date	7/6/2017 [7/6/2017]
Required Quantity	1.0000
Search Stock Cancel	
Available Stock	
Required Quantity of Parts not available in the Inventory. Use Order Parts button to order from a Supplier/Distributor.	
Order Parts Cancel	

Work Order Lines – These contain the work details of a Work Order. Multiple work order lines of the following type can be created on a Work Order:

- *Expense* - When information about miscellaneous expenses is to be captured.
- *Labor* - When information about labor charges is to be captured.
- *Parts Usage* - When information about consumed service parts and consumables is to be captured.
- *Request/Receipt* - When information about request/receipt of service parts from another fellow technician or depot is to be captured.
- *Travel* - When information about travel expenses is to be captured.
- All work order lines have a checkbox, 'Use Price from Pricebook/Contract', to automatically calculate the price of a product/service from the Pricebook or Service Contract associated with the products/services on the Work Order.
- The 'Line Price Per Unit' value gets populated if the corresponding price is found for the product/service. Alternately, the user can enter the price of the work order line manually.
- For work order line of type 'Parts Usage' the 'Discount%' value for the selected product is automatically populated once the record is saved, if the 'Discount%' for the selected product is specified in the 'Parts Discount' related list record associated with the 'Service Contract' entitled for the Work Order.

Create Service Quote – Service Quote contains the cost of the service that is sent to the customer in order to get the approval.

- On clicking 'Create Service Quote' for the first time, a Service Quote with 'Open' status is created on the Work Order, provided it has at least one Work Order Line of either 'Labor' or 'Expense' or 'Parts Usage' or 'Travel' type.
- Each Service Quote has multiple Service Quote Lines that are created corresponding to the Work Order Lines on the Work Order, provided the lines have 'Include In Quote' check-box checked.
- The 'Unit Price' and 'Quantity' values on Service Quote Lines are equivalent to 'Line Price Per Unit' and 'Line Quantity' values on Work Order Lines, provided the latter are not blank. If they are blank, the

former are equivalent to 'Estimated Price Per Unit' and 'Estimated Quantity' values on Work Order Lines.

- On clicking 'Create Service Quote' when there already exists one, a new Service Quote with 'Revised' status is created on the Work Order. The previous Service Quote can also be tracked from the 'Revised From' value on the revised Service Quote.

Create Proforma Invoice – Proforma Invoice refers to the estimated invoice sent to the customer in advance of delivery of products.

- On clicking 'Create Proforma Invoice' button, the Work Order is checked against the matching active Proforma Invoice Rules configured in the system.
- If a matching rule is found, a Proforma Invoice is generated for the Work Order, provided the Work Order has at least one Work Order Line. Each Proforma Invoice can have multiple Proforma Invoice Lines, one for each Work Order Line on the Work Order.
- When defining Proforma Invoice Rule, if the 'Include Non-Billable Lines' check-box was left unchecked, then Proforma Invoice Lines get generated only corresponding to the Work Order Lines that have 'Is Billable' check-box checked.
- If the 'Include Actual Costs' check-box was left unchecked, then the 'Price' and 'Quantity' values on Proforma Invoice Line match the 'Line Price Per Unit' and 'Line Quantity' values on Work Order Line. Otherwise, if it was checked, the 'Price' and 'Quantity' values on Proforma Invoice Line match the 'Estimated Price Per Unit' and 'Estimated Quantity' values on Work Order Line.

Close Work Order – This enables a user to close the Work Order, only if the associated Work Order Lines have been marked as 'Completed'.

On clicking 'Close Work Order' button, the user is redirected to fill the required information before closing the Work Order.

If all the associated work order lines are completed and the required information is filled, the Work Order gets closed and the user is redirected to the Work Order home tab.

An error message is displayed in case the Work Order is already closed.

Work Order Closure

Send Service Report to Customer ☒

Work Performed

Repair Operation

Email Service Report To

Corrective Action

Signature Date

6.9 Inventory Management Process

Inventory Management supports parts requests & receipts, stock adjustment, stock transfer of the inventory and maintains the detailed history of transactions of items. Optima Pro supports monitoring and update of inventory as per the user actions.

6.9.1 Parts Request

- It allows requesting for parts from different locations. Parts requested are usually based on the requirements and are not requested specifically for a Work Order.
- Parts Request has 'Requested From' and 'Required At Location' values to track the locations.
- With every request, a new line item gets added under Parts Request Lines related list.
- Parts Request Line has 'Quantity Required' and 'Quantity Received' values to track the quantity required at 'Required At Location' and the quantity dispatched from 'Requested From' location.
- When the 'Quantity Required' equals 'Quantity Received', and 'Status' of Request Line is marked as Completed, then the 'Available Quantity' value for the Product Stock associated with 'Required At Location' increases and that of 'Requested From' decreases, by the number received & dispatched respectively.
- If the 'Quantity Received' is less than the 'Quantity Required' for a Parts Request Line, and 'Date Received' value is not blank, then a new Parts Request Line is generated corresponding to this Line, with the Status as 'Open' and the 'Quantity Required' value as the difference of the required and received quantity of the old Line. The status of the old Line automatically changes to 'Completed'.

6.9.2 Parts Order

- Users can order parts from different locations. Parts Orders are usually maintained when handling the inventory of a Vendor.
- Parts Order has 'From Location' and 'To Location' to track the location of order and delivery of parts.
- With every order, a new line item gets added under Parts Order Line related list.
- Parts Order Line has 'Expected Quantity' and 'Received Quantity' values to track the quantity required at 'To Location' and the quantity dispatched from 'From Location'.
- When the 'Expected Quantity' equals 'Received Quantity', and 'Status' of Order Line is marked as Received, then the 'Available Quantity' value for the Product Stock associated with 'To location' increases and that of 'From Location' decreases, by the number received & dispatched respectively.
- If the 'Received Quantity' is less than the 'Expected Quantity' for a Parts Order Line, and 'Received On' value is not blank, then a new Parts Order Line is generated corresponding to this Line, with the Status as 'Open' and the 'Expected Quantity' value as the difference of the expected and received quantity for the old Line. The status of the old Line automatically changes to 'Completed'.

6.9.3 Stock Transfer

- Stock Transfer refers to the transfer of products between two different locations, without the involvement of actual shipping.
- Stock Transfer has 'Source Location' and 'Destination Location' to hold the location values for the transfer of the products.
- With every Stock Transfer, a new line item gets added under Stock Transfer Lines related list.
- Stock Transfer Line has 'Quantity Transferred' value that tracks the quantity to be transferred between the source and the destination locations.
- When a new Stock Transfer record is created and the 'Quantity Transferred' value is given, then the 'Available Quantity' value for the Product Stock associated with 'Source location' increases and that of 'Destination Location' decreases, by the number transferred respectively.

6.9.4 Stock Adjustment

- Stock Adjustment refers to the reset or adjustment of stocks if any mismatches are found in the system and the Physical Inventory.
- Stock Adjustment record when created allows the user to select the 'Product', and 'Location' for which adjustment is to be performed.
- On saving the record, a matching Product Stock is searched so that the adjustment can be performed, else an error message is displayed.
- If the matching Product Stock is found, then its 'Available Quantity' value is mapped with the 'New Quantity' value of the Stock Adjustment record.
- Alongside, a new Product Stock for the same product is created with the Status as 'Adjusted' and Available Quantity' equals 'Change Quantity' on the Stock Adjustment record created.
- 'Change Quantity' on Stock Adjustment is calculated as the difference of 'Available Quantity' on the matching Product Stock and 'New Quantity' on the Stock Adjustment record.