



OPPORTUNITY LEAD GENERATION ANALYZER

User Guide 6.0

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1. Introduction to OLGA

» **Connecting Data** » **Predicting Leads** » **Closing Sales**

1.1 What is OLGA?

Cat® Opportunity Lead Generation Analyzer (OLGA) is a web-based application developed by Caterpillar to calculate an individual Cat Dealer's parts and service opportunities based on the equipment population reported by the Dealer. OLGA calculates past and future Dealer opportunities by **connecting data** from Dealers with data from Caterpillar sources based on the actual equipment lifecycle position.

1.1.1 OLGA vs. PTOS

PTOS calculates opportunity based on average cost per hour and average annual hours values, with a factor applied for the age of the unit. This results in an average value of opportunity per year for each serial number. The reality is that a machine or engine may not consume a uniform value of parts and labor every year.

OLGA improves the opportunity calculation by using BUILDER files along with calculated Service Meter Unit (SMU) and Utilization Rate values to identify when repair events are forecast for each individual serial number. The improved opportunity calculation leads to a **more realistic** percentage of part sales (POPS) and percentage of labor sales (POLLS) results.

Using BUILDER files and serial number specific SMU and Utilization Rate data allows OLGA to **predict future repair events**, functionality that is not available in PTOS. OLGA predicts repair events 3 years ahead for each serial number in the Dealer's equipment population.

OLGA is a Caterpillar-hosted web application whereas PTOS is installed locally on each Dealer's DBS platform. The advantages of moving to a hosted solution are that Dealers who are not operating DBS can utilize the application and Caterpillar can deploy functionality updates quickly and regularly.

1.2 The Value of OLGA

The OLGA project was initiated directly from the Voice of the Dealer. Dealers require a system that provides additional capability in identifying specific future Product Support opportunities that can be integrated into the Dealers' sales funnel.

It provides an **unparalleled** ability to identify serial number and component specific parts and service opportunities up to three (3) years into the future that gives Dealers an advantage over competitors.

OLGA enables the Dealer’s sales team to provide each customer with tailored advice through the **proactive targeting of quantifiable parts and service leads**, resulting in strengthened customer relationships and increased loyalty. Dealers will be able to view future opportunities to make more accurate touch points with their customers and **close sales**.

The added capability of OLGA, along with a more accurate and realistic calculation of Percent of Parts Sales-Caterpillar (POPS-C) and Percent of Labor Sales (POLS) better enables Caterpillar and Caterpillar Dealers to focus on what is really important—**providing valued parts and service solutions to customers**.

The benefits OLGA Include:

- Sales Team** Identify and target upcoming parts and labor opportunities for each customer.
- Marketing Team** Identify key areas of opportunity and drive targeted marketing campaigns.
- Service Operations** Use OLGA opportunity data to plan resource allocation.
- Parts Operations** Use OLGA opportunity data to help forecast parts requirements.
- Key Initiatives** Use OLGA sales and opportunity data in Dealer Growth and Profitability studies, Across the Table work streams, and as an input to short term growth plans.

1.3 The OLGA Data Landscape

OLGA relies on receiving the following data from each Dealer to produce opportunity calculations:

- Customer Data** To aggregate sales and opportunities of the customer.
- Equipment Data** To calculate opportunities for each unit in the Dealer’s equipment population.
- Work Order Data** To determine when repair events were last completed in order to predict when the next events are due.
- Invoice Data** For sales data aggregation.

More details on Dealer data are provided in **Section 3.2 Dealer Data and Cleanliness**.

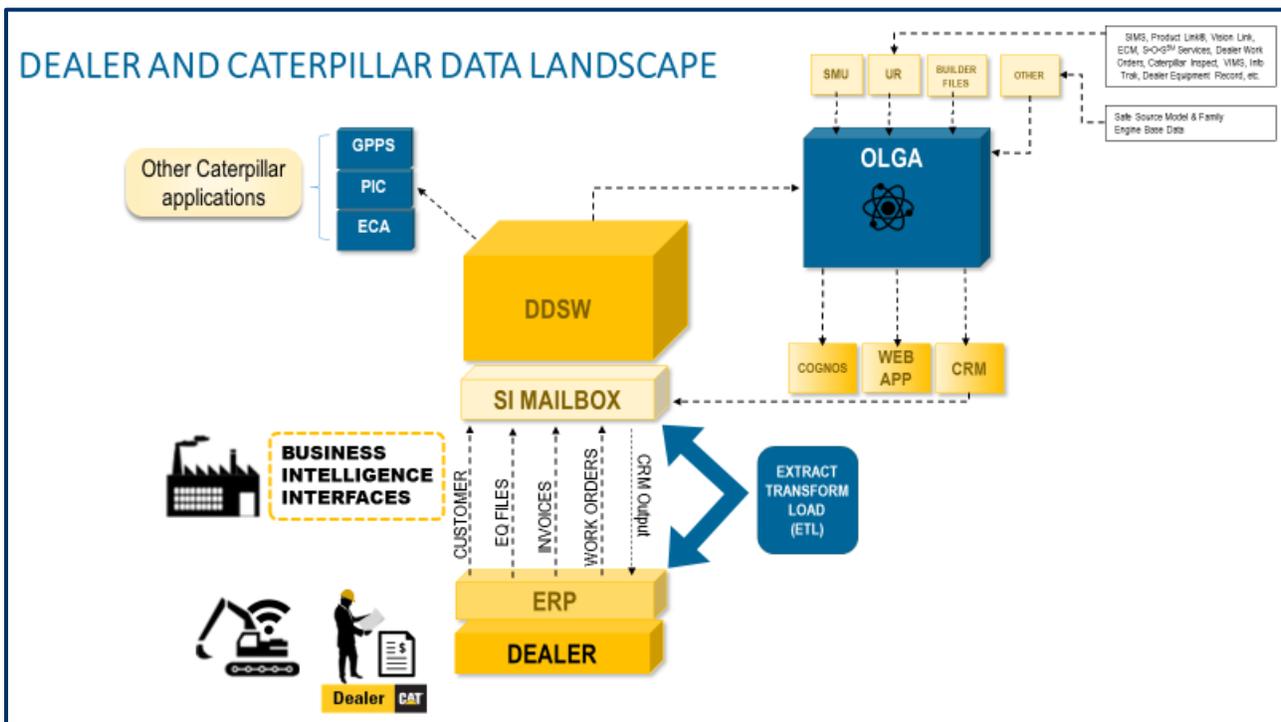
The illustration on the next page demonstrates the flow of data that goes in and out of OLGA. For each serial number in the Dealer’s equipment population, OLGA matches a BUILDER file, SMU, and Utilization Rate data points. These three elements, along with pricing information, combine to enable the opportunity calculation. The Dealer’s sales history is then divided by the opportunity to calculate POPS and POLS.

$$\text{POPS} = \frac{\text{PARTS SALES}}{\text{PARTS OPPORTUNITY}}$$

$$\text{POLS} = \frac{\text{LABOR SALES}}{\text{LABOR OPPORTUNITY}}$$

Dealers access the OLGA output data in three ways:

- Through the OLGA web application (**Section 2.3**)
- Through a web version of COGNOS (**Section 6.1**)
- Through an input file into the Dealer’s CRM system (**Section 2.8**)



1.4 OLGA Reference Materials

The intent of this User Guide is as a reference and learning tool for understanding how to use the OLGA application and its output. This information should be clear, understandable, and provide the user with the ability to configure OLGA for their Dealership and to work with the OLGA output in the Dealer's sales process. The output can also be used in the marketing departments, facility planning, inventory, and other business areas.

This document is subject to change as new OLGA functionality and enhancements are added. New versions will be updated on the web page [Dealer.cat.com/OLGA](https://dealer.cat.com/OLGA), the [OLGA Dealer Connections](#) website, and within the [OLGA web application](#) through the Help menu.

The additional materials found on [Connections](#) and/or through [Dealer.cat.com/OLGA](https://dealer.cat.com/OLGA), include:

- Project Overview
- Frequently Asked Questions (FAQs)
- Overview Videos
- Training Videos
- Usage Examples
- Dealer Testimonials
- Release Notes
- Other Reference & Learning Materials
- Links to additional training videos on [Channel 1](#)

Other areas of interest include:

- The Parts Pricing information: <https://ppubs.cat.com/ppubs/index.do>
 - This hosts pricing changes and updates. It also has the Parts Commercial Groups, which replaced Part Subcategory in OLGA.
- Sales Reporting of Prime Product: <https://dealer.cat.com/en/bt/reporting/sales-pins-industry-reporting/c/prime-product-sales-reporting.html>
 - This hosts the Customer Industry Codes (CIC)

2. Getting Started

2.1 Data Security

Data security will abide by the Data Sharing Agreement signed by Dealers prior to sending data to the Caterpillar Digital Data Warehouse (CDDW). For more information about the Data Sharing Agreement, contact your Caterpillar OLGA DSD consultant.

Dealer data is considered *Caterpillar Confidential: Yellow*. Access to OLGA is controlled by CWS ID and can be given to an individual for a dealership with permission by the Dealer Administrator. Dealer employees will have access to only their dealer's data. If access is granted, the user has access only to data identified by their assigned role within the application.

Dealer Access

The OLGA web application and COGNOS can be accessed through Internet Explorer version 10 or 11. Dealer employees will be restricted to their own Dealer's data. If access is granted, the user has access to data identified by their assigned Role.

Caterpillar Access

The OLGA web application and Cognos data will be accessed by Caterpillar Support for data table design and maintenance, troubleshooting, data validation, and application issues. Caterpillar Global Aftermarket, Marketing & Brand Division (GAMB) will have access to dealer data for support and analytics to work with dealers in helping grow parts sales. Access by other Caterpillar applications and/or individuals outside of GAMB to the OLGA data at the aggregate level may be used internally at Caterpillar to analyze market segments and trends; access to customer level data will be granted if the dealer has given approval and/or the dealer creates that user account access. Caterpillar will not share a dealer's data with other dealers.

Caterpillar Employees may be granted access to the Dealer's OLGA instance. These requests should be made by the employee directly to the Dealer. The Dealer can grant or deny access and should be monitored by the OLGA Dealer Administrator.

End User Agreement

Copies of the End User Agreement (EUA) and the Data Governance statement are available on <https://dealer.cat.com/olga> under the *Terms & Conditions* section.

Over the last few years, more and more businesses have migrated to cloud-based systems through outside vendors to store their data and services information. Caterpillar Dealers are included in this migration as it has proven to provide a significant economic benefit.

While Caterpillar understands these benefits, we also realize the unique data security risks inherent in cloud-based systems. To safeguard data for both parties, the Opportunity Lead Generation Analyzer (OLGA) data security framework provides protection and enables this cloud-based system transformation.

There are risks associated with third-parties having access to Caterpillar data via third-party systems such as Customer Relationship Management (CRM) and/or Enterprise Resource Planning (ERP) systems. Caterpillar is committed to being in alignment with industry standards and as such has conducted benchmarking with major third-party vendors. Understanding these third-party vendor risks requires us to act accordingly taking any and all necessary precautions by:

- Leveraging appropriate technologies (e.g. encryption at rest and in transit).
- Actively managing third-party vendor relationships (e.g. security assessments).
- Incorporating appropriate, industry standard protections in your vendor agreements.

To best guard Caterpillar Dealer data as well as Caterpillar data, we have found that these industry standard protections must be updated through the OLGA program. As a result, Caterpillar requires dealers to ensure:

- Third party vendors that house OLGA data in their systems are using the data exclusively for dealer purposes; and
- Reasonable security measures are in place to safeguard the data itself.

Caterpillar believes this EUA fits into the OLGA data security framework. We are acting in the best interest of Caterpillar and Caterpillar Dealers. We remain committed to continuously reviewing all in place security measures related to dealer data and services information. And as technologies and associated risks rapidly progress, we will continue to evolve and adjust as needed.

Dealer Expectations: Third-Party Software Vendors

If you are using a third-party software vendor to store and/or process OLGA data, then you should already have a data security agreement in place with that vendor as this should be a standard practice. Minimum expectations for security measures, including the need for encryption both in transit and at rest, are already standard in the third-party software industry. OLGA data that the dealer sends or places into a third-party hosted or managed system should be encrypted in transit and at rest. Caterpillar's industry benchmarking has shown that most CRM providers are capable of providing this service.

2.2 Roles & Responsibilities

The successful use of OLGA depends on an informed and coordinated team. Key roles and responsibilities must be understood throughout the Dealership. It is recommended that Dealers plan how the key roles suggested below work together to ensure optimal use of OLGA data to drive parts and labor sales.



Executive Management

- Champion the value of OLGA within the organization.
- Directly support the OLGA Champion and Coordinator.
- Incorporate OLGA within the Dealer's strategy and ensure that OLGA is embraced at the tactical level.
- Participate in OLGA foundational training.



OLGA Champion

- Owner and driver of OLGA implementation and ongoing processes within the Dealership.
- Accountable for use of OLGA within Dealership to drive incremental parts and labor sales across the organization.
- Champion the value of OLGA information in all directions within the Dealer organization to align with Dealer & Cat product support initiatives.
- Single point of contact for OLGA decisions and issues.
- Liaison between Caterpillar MSOR / GASD ASR / DM and Dealer.
- Identify resources to fill OLGA key roles and ensure they have goals to utilize or support OLGA.
- Ensure key roles participate in necessary activities (initial and ongoing training).
- Ensure training and succession plans are in place for key roles.
- Participate in OLGA foundational and advanced training.



OLGA Coordinator

- OLGA system administrator – maintain configurations and user access control, communicate system updates and outages.
- First point of contact for functional and technical support within the Dealership.
- Overall understanding of OLGA mechanics (inputs, calculations, and outputs).
- Ensure key roles are trained to use the OLGA system and data effectively.
- Facilitate transition from PTOS to OLGA; ensure data source cleanliness.
- Participate in OLGA foundational and advanced training.

Additional key roles that OLGA will also touch are the following people within the Dealership:

Marketing Analyst / Product Support Specialist

- Overall understanding of OLGA reporting capabilities (OLGA Web App and Business Objects)
- Analyze data to identify opportunities and areas of focus (data mining, correlation with other systems).
- Develop programs to target opportunities identified from OLGA.
- Work closely with OLGA Coordinator to ensure accurate OLGA configurations and to create reports for Dealer management.
- Work closely with the sales staff to ensure that OLGA data is being put into the sales funnel and used for planning.
- Participate in OLGA foundational and advanced training.

Product Support Manager / Branch Manager / Service Manager

- Understand the value of OLGA to their business unit/territory and communicate this to their team.
- Implement the use of OLGA data within the business unit/territory.
- Work closely with the OLGA Champion, marketing analyst, and lead management process owner.
- Participate in OLGA foundational and advanced training.

Sales Team

- Includes Key Account Manager (KAM), Parts Service Sales Rep (PSSR), Inside Sales Rep (ISR), etc.
- Understand how to utilize OLGA leads to drive sales.
- Monitor and communicate accuracy of leads to the appropriate Dealer Resource (OLGA Coordinator, Marketing Analyst, etc.).

- Communicate customer and equipment record accuracy from the field to the ERP Gatekeeper.
- Participate in OLGA foundational and advanced training.

Parts Counter

- Work with manager to understand how they will use OLGA data (if applicable).
- Ensure correct customer and equipment information is captured to enter into the Dealer ERP.
- Minimize cash sales accounts by inserting accurate customer accounts on invoices.
- Capture accurate serial numbers when creating invoices.
- Participate in OLGA foundational training.

Parts Operations

- Understand the impact of OLGA on parts operation review.
- Understand the impact of OLGA on inventory management at the Dealership.
- Understand the impact of OLGA data on the depth and breadth of parts inventory.
- Participate in OLGA foundational training.

CRM Manager / Lead Management Process Owner

- Determine how OLGA leads will be used within the current CRM system/process.
- Ensure OLGA leads are captured, qualified, quantified, distributed to the sales staff, and measured separately for business growth.
- Work closely with OLGA Coordinator to determine threshold parameters for CRM output.
- Participate in OLGA foundational and advanced training.

Training Manager

- Ensure training and knowledge succession plans are executed for all key roles.
- Work closely with OLGA Champion and Coordinator.
- Participate in OLGA foundational and advanced training.

IT Manager

- Understand importance of OLGA to the Dealership and the critical role IT plays.
- Understand the impact of data mapping on OLGA output.
- Enable the success of OLGA by supporting data mapping, maintaining appropriate technical infrastructure, ensuring data cleanliness, etc.
- Ensure support for OLGA operations.

- Work closely with OLGA champion and coordinator.
- Participate in OLGA foundational and advanced training.

IT Team

- Support data mapping and source-data cleanliness.
- Participate in OLGA foundational training.

ERP (Dealer's Business System) Gatekeeper

- Understand the correlation between ERP system and required OLGA data fields.
- Enable the success of OLGA by ensuring data cleanliness (Customer and Equipment records, equipment utilization, etc.).
- Ensure customer and equipment information captured by parts counter is validated and inserted into the ERP.
- Work closely with the OLGA Coordinator.
- Participate in OLGA foundational and advanced training.

Standard Job / BUILDER File Owner / Contract Manager

- Understand the impact of BUILDER files on OLGA.
- Work with OLGA Coordinator to identify key models in territory to determine which BUILDER files to modify and upload to OLGA.
- Ensure Dealer modified BUILDER files contain complete repair options for all major classes (if applicable) and are reviewed annually.
- Participate in OLGA foundational and advanced training.

PTOS Champion / PTOS Coordinator

- Understand the transition/migration from PTOS to OLGA.
- Participate in OLGA foundational training.

Marketing Call Center

- Work with manager to understand how they will use OLGA data (if applicable).
- Participate in OLGA foundational training.

Prime Product Manager / Used Equipment Manager / Dealer Rental

- Understand the overall impact of OLGA on the Dealership.
- Work with the OLGA Champion and Marketing Analyst for specific data needs (if applicable).
- Participate in OLGA foundational training.

Equipment Management Analyst

- Work with OLGA Coordinator, Marketing Analyst, and CRM Manager to understand how OLGA data/leads will be combined with current EMS data/leads.
- Participate in OLGA foundational training.

2.3 Logging into OLGA

OLGA is a Caterpillar hosted web application accessed through:

<https://olga.cat.com>

Users should access OLGA via Internet Explorer versions 10 or 11. Access is CWS ID controlled. Users will be prompted to enter their CWS ID and Password to gain entry to the OLGA web application.

2.4 Granting OLGA Access

Individual access to OLGA is at the Dealer's discretion. Dealers determine which internal staff and which Caterpillar staff have access to their OLGA web application and what level of access is provided. The OLGA Coordinator should manage user access via the Administration Menu in the OLGA web application. To maximize data security, there is an expectation that dealers will conduct a full user access review at least once a year, though it is suggested that this review take place at least twice a year.

Dealers must assign each individual User Account to a Role. The Role determines the level of access to the application. For example, a Product Specialist Role could be set up with limited access to the two key reports in OLGA. Then three individual users could be assigned to that Product Specialist role, and each will only see the two key reports in OLGA.

Access can be modified at any time through the User Accounts page. A user cannot be completely deleted, however the user's access can be modified to Inactive status. This will retain historical context. Note that a role can only be deleted if each of its assigned users have already been migrated to an alternative role prior to deletion. Users can also export a list of user accounts through the export to excel feature, including various filter options.

Access Review & Security

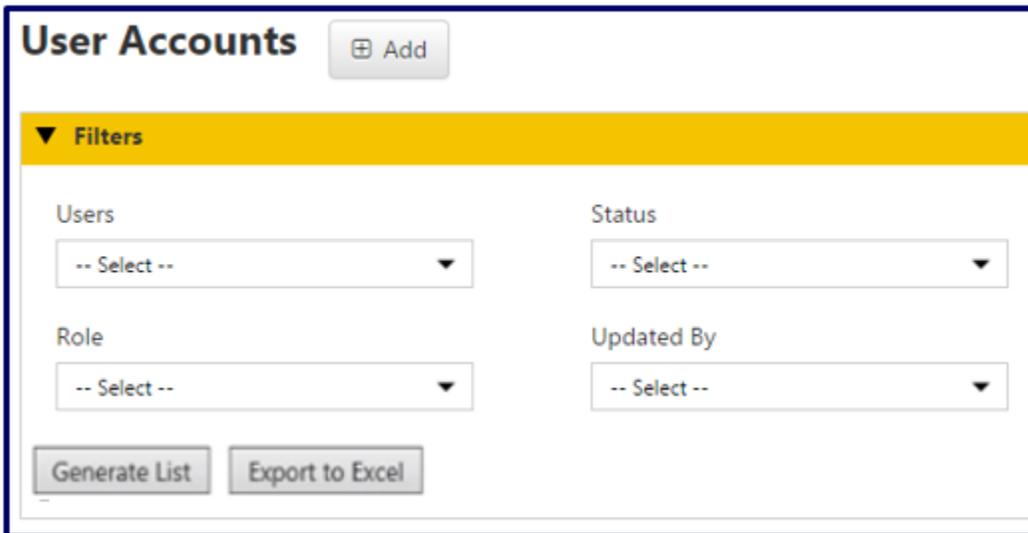
OLGA will continually identify any user that has not logged on to OLGA in the last 60 days. If inactive for 60 days, a system-generated email is sent to the affected user and a copy is sent to all users assigned to the DEALER_ADMIN user role for the related Dealer. If no further activity occurs in the following 30 days (a total of 90 days), the User Account Status will automatically be changed from ACTIVE to INACTIVE and another notification will be sent explaining the removal of access with copies to all users with the DEALER_ADMIN user role. If a user has access to more than one dealer, they will receive notifications for each Dealer.



Best Practice: Dealers should conduct a full user access review at least yearly, preferably more often (ex: monthly, twice a year, etc.).

2.4.1 User Accounts Page

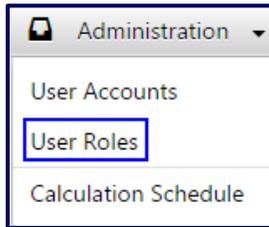
Under the Administration Menu → User Accounts page, the Dealer can use either drop down menu to search for a user or the status of users. Users can also export a list of user accounts through the export to excel feature, including various filter options.



2.4.2 How to Grant OLGA Web Application Access

- 
- 1) In the OLGA web application, navigate to the Administration Menu → User Roles

- a. **Note:** If the role to which the user should be assigned is already set up (for example, a Product Support Specialist Role has been previously set up and the intent is to link a new user to this Role), skip to Step 5.

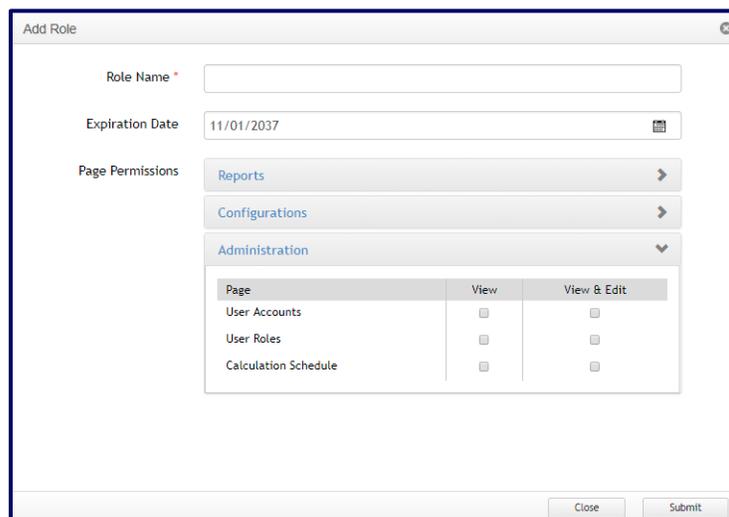


Best Practice: The DEALER_ADMIN role is a default role that automatically gets access to all new pages and functionality. This role is intended for all Dealer Administrators – there is no need to create a separate administrator role.

- 2) Select “Add” to set up a role to which the user will be assigned



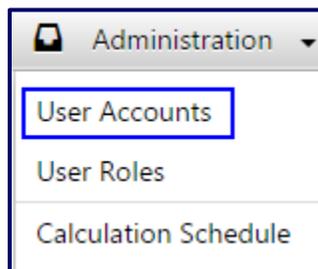
- 3) Set up the role including assigning access permissions with either View or View & Edit permissions for each category (Reports, Configurations, & Administration)



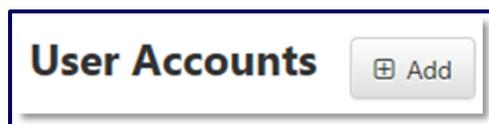
Best Practice: Only provide the OLGA Coordinator(s) and Champion(s) access to View & Edit the Configurations and Administration. Dealers should avoid having too many people able to modify the key OLGA configurations and manage user access.

Note: The Sales Rep data level permissions are only applied to the Opportunities/Sales Search Report and the Past and Future Opportunities Report. The permissions are **not** applied to the configurations, administration, customer exclusion, or error reports. For consistency, be sure the Sales Rep is also set up in a Role with restricted access to those pages.

- 4) Click Submit to save the user role
- 5) Navigate to the Administration Menu → User Accounts section



- 6) Select "Add" to add a user account



- 7) Set up the User Account:
 - a. Type the user's CWS ID into the Login Id field & hit Enter
 - i. This will automatically populate the user's Full Name and Email Address
 - b. Enter the user's Sales Rep Number (if applicable) and Job Description
 - c. Select the Dealer
 - d. Select the Role to which the user will be associated
 - e. Select the Sales Rep Report Data you want the user to be able to view
 - i. Options:
 - 1. *Check Box* = ALL Sales Rep Data
 - 2. *Remove Check Box & do *not* use Filter* = NO Sales Rep Data
 - 3. *Remove Check Box & use Filter* = Specific sub-set of Sales Rep Data (may select 1 or multiple from Filter)

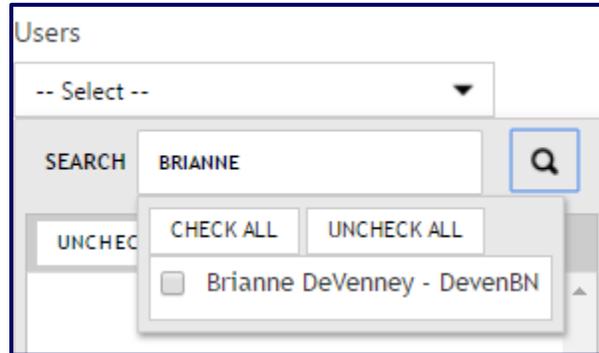
- f. Set the Status to “Active”
- g. Select Submit

Best Practice: When the user no longer requires access to OLGA, change their Status to “Inactive.” Note that Caterpillar email notifications are sent to all “Active” users.

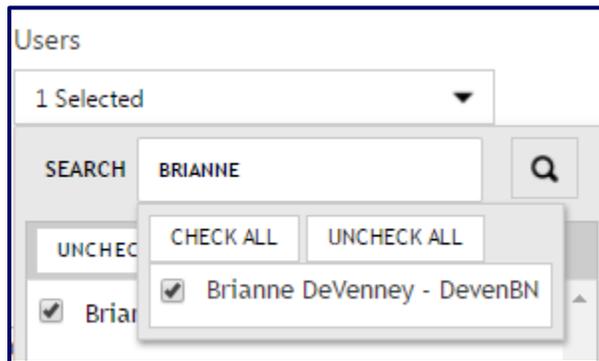
2.4.3 How to Filter by User or User Status

- 1) In the OLGA application, navigate to the Administration Menu → User Accounts

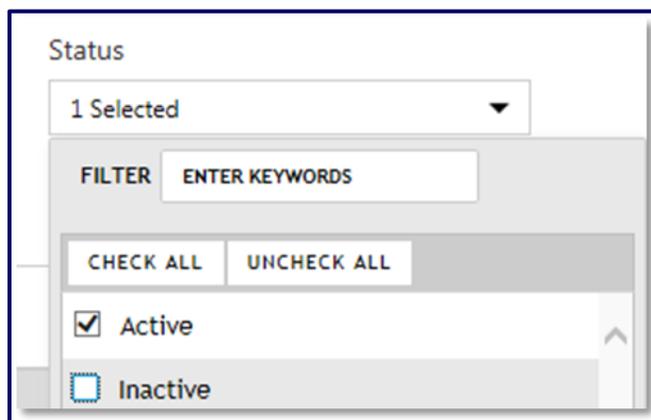
- 2) Select the drop down option under “Users” and type in a user name or CWS ID & Click Enter



- 3) Once the appropriate name appears, check the box to generate the report



- 4) If looking for Inactive or Active status of users, go to the Status drop down menu and select either option



- 5) Once the report is generated by either User or Status, then the user can edit the User Accounts from the filtered user list

Name	Login Id	Email Address	View Report Data For (SalesRep)	Job Description	Dealer	Status	Role	Updated By	Updated Date (MM/DD/YYYY)	Last Logon	Edit
Brianne DeVenney	DevenBN	DeVenney_Brianne_N@cat.com	All	CAT OLGA ADMIN	Demo Dealer - TD11	ACTIVE	DEALER_ADMIN	Brianne DeVenney	06/27/2016 11:29:31 AM	06/02/2017 12:31:11 PM	

2.5 Calculation Schedule

Once a dealer is baselined and using monthly run functionality, then no further initial runs will be completed for that dealer. *Exception:* If an initial run is required because of changes in base data or by a special request is made through the DSD OLGA Consultants, who will coordinate approval from the Central OLGA team.

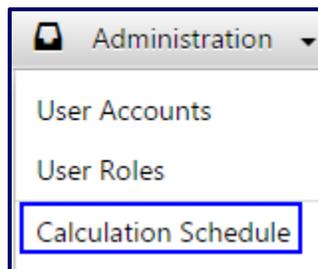
The Calculation Schedule page allows you to do two things: 1) set up an automatic schedule for monthly calculation runs, and 2) submit additional manual calculation runs.

The data may not run exactly when your schedule indicates if: A) the previous end of month data has not been received and processed in CDDW, or B) a large group of dealers are scheduled for the same day and time. Calculation runs take 4-8 hours to complete, depending on the volume of dealer data.

Best Practice: Set the day and time so that the data run completes prior to the start of your business day.

2.5.1 Setting Up a Calculation Schedule

- 1) In the OLGA web application, navigate to the Administration → Calculation Schedule



- 2) Select the date and time you want the OLGA calculation run too occur each month
 - a. Note that monthly processing will not begin prior to the 7th calendar day each month

Day of Month: Time: 

- 3) Select the Save button
 - a. OLGA will automatically perform a calculation run at this date and time each month

Schedule Calculation

Specify the date and time that you would like the OLGA Calculation run to occur each month. Once this is set, OLGA will run automatically each month at the specified date and time.

Monthly processing will not begin prior to the 7th calendar day of each month.

Day of Month: Time: 

2.5.2 Running a Manual Monthly Run

The ability to re-run data on demand (after the scheduled monthly run).

- 1) In the OLGA web application, navigate to the Administration → Calculation Schedule

Administration ▾

- User Accounts
- User Roles
-

- 2) Select the month for which you want to perform an additional calculation run
 - a. This option is available for each month only after the scheduled monthly run has occurred. The options depend upon the last run date and the current date.

End Of Month:

- 3) Select whether you want to import new customer and equipment data (Yes/No)
 - a. This is used when dealer data has been updated and sent to CDDW (Ex: Sales Rep Reassignment)

Import new Customer and Equipment data? Yes No

- 4) Select whether you want to import new work order and invoice data (Yes/No)
- a. This is used when Configurations have been updated (Ex: Added a branch store description or added a Sales Rep exclusion)

Import new Work Order and Invoice data? Yes No

- 5) Select the Run Now button to start the calculation run.

Manual Monthly Run

Use the Manual Run to start a new calculation run. Use this option to perform an additional calculation run after the scheduled monthly run.

End Of Month:

Import new Customer and Equipment data? Yes No

Import new Work Order and Invoice data? Yes No

Note: The date/time of the schedule will remain on the page until the run is picked up in the queue for calculation. This may be delayed based on OLGA's capability to run a maximum number of runs at a time.

2.5.3 Manual Monthly Run Examples

Example 1

If the last successful run for a dealership was for End of Month May and the current date is July 5, then the month option on the schedule page will be MAY.

Example 2

If the last successful run for a dealership was for End of Month May, the current date is July 7, and the scheduled monthly run has not yet occurred, then the month options on the schedule page will be MAY and JUNE.

Note: Once an End of Month (EOM) run is complete, there is no option to go back to a previous EOM. You can only move forward; you cannot move backwards.

Exception: An exception for an Initial Run may be requested if there is a significant change in base Dealer data.

2.6 Configurations

The first task in OLGA implementation is to set up the Dealer's unique configurations. These should then be maintained on an ongoing basis as changes in the Dealer's business occur.

Most of the configurations in OLGA have expiration dates. This is to ensure that Dealers periodically review and validate their OLGA configurations. Details on configuration expiration dates are:

- Expiration dates can be adjusted 1 - 12 months from current date.
- The default expiration date for any configuration related to pricing is six months, any other defaults have a 12 month expiration date.
- Any configuration within 30 days of expiration will be highlighted in yellow.
- Any configuration that has passed expiration will be highlighted in red and the user will not be able to save the configuration without updating the expiration date. The configurations passed expiry will still be applied when the Dealer's OLGA data calculations are processed.



Best Practice: Dealer OLGA Coordinators should review all OLGA configurations twice a year, ideally in January and July at the time the generic parts prices will likely need updated.

All OLGA configurations will show who last updated the configuration, along with the date of the last update. All dates and times in OLGA are in **U.S. Central Standard Time**. Users in a different time zone to the U.S. Central Standard time zone should make note of the time difference between the local time zone and the U.S. Central Standard time zone so there is no confusion about configuration update dates.

All dates in OLGA are in the MM/DD/YYYY (month/day/year) format. Users should be aware of this as it could cause confusion for users from countries where the common format is DD/MM/YYYY.

2.6.1 Calculation Run Impact

When the OLGA calculations are being run, users will not be able to modify configurations. If any configuration changes are made, those changes will not be reflected until the *next* Calculation Run. When OLGA calculation is running the “Calculation Process Running” message will be displayed on the General Information tab.

Note: A calculation run is required in order for Configuration changes to be reflected in the dealer's data through the OLGA application.

2.6.2 Adjustments by Parts Major Class Configuration

This is no longer applicable. If you have questions regarding this topic, please contact your OLGA support consultant.

2.6.3 Branch Stores Configuration

The data transferred to Caterpillar via the data mapping process includes the store code that the customer is assigned to. OLGA provides the Branch Stores configuration to allow the Dealer a label for their store codes with the store name. This is to allow ease of recognition and analysis. Branch names can be added, changed or deleted at any time. The Branch Store Names configured will then be displayed in the OLGA report filters and output data files.

Example 1:

The Dealer has 3 branches, Kingston, California, and Queenstown with the branch store codes of 01, 02, and 03.

Configuration Input: The Dealer will enter the branch store code and name as follows:

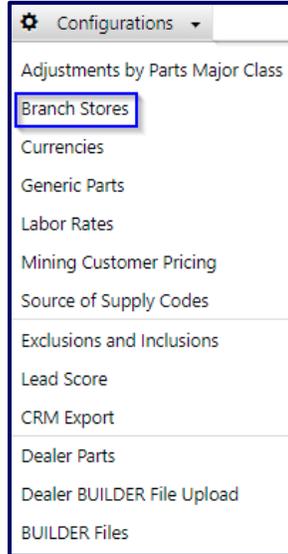
01 – Kingston

02 – California

03 – Queenstown

2.6.3.1. How to Configure OLGA Branch Stores

- 1) In the OLGA web application, navigate to the Configurations Menu → Branch Stores



- 2) To add a new Branch Store Code and Name, select “Add” to insert a new line in the table



- 3) Type in the Branch Store Code (as transmitted in the Dealer’s data mapping process) and the name label for the Branch Store & select “Save”

Branch Store Code	Branch Store Name
01	Kingston
02	California
03	Queenstown

Best Practice: The user can select “Add” multiple times to create several blank rows and can select save after completing all of the rows, rather than after every individual entry.

2.6.3.2 How to Review Branch Stores History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Branch Stores

1) Click on the History button on the upper right hand side of the section

Branch Store Code	Branch Store Name	Updated By	Updated Date (MM/DD/YYYY)	Delete
00-00	00-00	Button Lori L	07/11/2018 12:59:28 PM	✘
01	Kingston	Aimee Mather	07/02/2015 06:52:21 PM	✘
03	Queenstown	Andrea A Berke	08/17/2015 12:43:43 PM	✘
11	Awesome	Kristin Freidinger	05/04/2016 11:21:14 AM	✘
23	MCC Test	Costello Megan C	06/13/2018 03:23:06 PM	✘
28t	Dawn test	Dawn Getz	06/03/2016 08:19:13 AM	✘
45	Dallas	Eric Jeffery	10/09/2015 09:20:03 AM	✘
98	Kristin's store	Kristin Freidinger	01/15/2016 10:01:49 AM	✘

2) A pop-up window will appear and show the below columns:

- a. Action
- b. Brand Store Code
- c. Column Name
- d. Old Value
- e. New Value
- f. Updated By
- g. Updated Date

3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.6.4 Currencies Configuration

Dealers must select their default currency; the currency in which all sales and opportunity data in OLGA will be displayed. Currencies can be added, changed or deleted at any time. A conversion rate must also be specified to convert all currencies used by the Dealer, to the default currency.

The Dealer should review their invoice information to verify what currencies are being used. If the Caterpillar area parts price file differs from this default currency, or the Dealer transacts with customers in other currencies, these should also be defined with a conversion rate to the default currency.

To place the most up to date currency conversion, use www.xe.com.

Note: If the Dealer's Default currency and other currencies are not updated 30 days prior to the expiration date, the line item will highlight yellow. Once it has passed the expiration date, the line will appear red. If the Dealer needs to make any changes to the currency, they will first have to update the expiration date before making any changes.

Example 1:

The Dealer's default currency is Japanese Yen. The Caterpillar area parts price file is in Japanese Yen and the Dealer only transacts with customers in Japanese Yen.

Configuration Input: The Dealer should enter the default currency in OLGA as Japanese Yen. No currency conversion rates are required.

Example 2:

The Dealer's default currency is British Pounds. The Caterpillar area parts price file is in Euros and the Dealer transacts with customers in Euros and Swiss Francs.

Configuration Input: The Dealer should enter the default currency in OLGA as British Pounds. They must also enter currency conversion rates from Euros to British Pounds and from Swiss Francs to British Pounds.

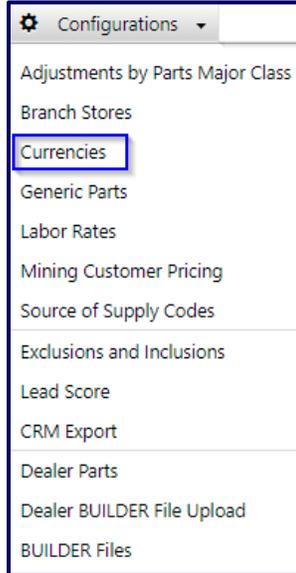
Example 3:

The Dealer's default currency is US Dollars (USD) and the nominated currency is Australian Dollars with an exchange rate of 1 USD = 1.25 AUD

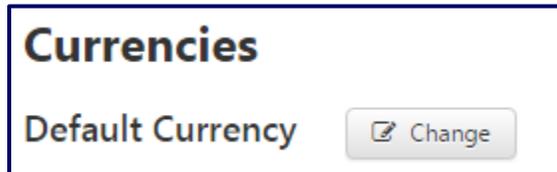
Configuration Input: Enter 0.8 (\$1USD/\$1.25 AUD) as the currency conversion rate.

2.6.4.1 How to Configure OLGA Currencies

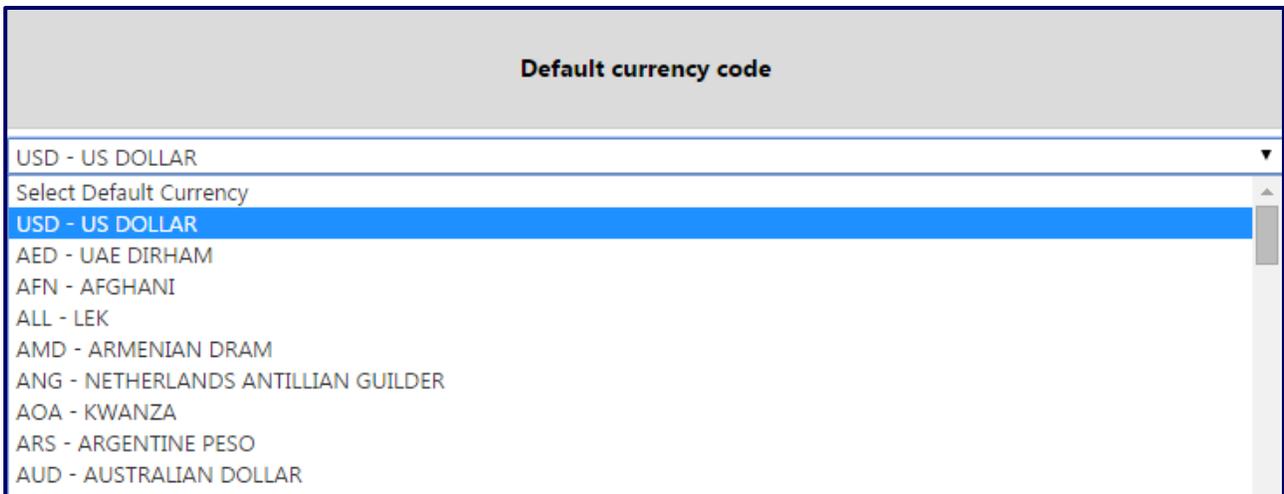
- 1) In the OLGA web application, navigate to the Configuration Menu → Currencies



- 2) If a change to the default currency is required, click the “Change” button at the top of the page.



- 3) Select the drop down button to change currency to the desired default currency from the drop down list of ISO standard currencies & select “Save”



- 4) To add a new currency conversion, select “Add” next to the Currency conversion rates subheading to provide a new blank currency conversion line



- 5) Select the currency from the drop down list and enter the conversion rate from that selected currency to the default currency and the expiration date

Currency	Conversion Rate	Expiration Date (MM/DD/YYYY)
Select Currency		
Select Currency AED - UAE DIRHAM AFN - AFGHANI ALL - LEK AMD - ARMENIAN DRAM ANG - NETHERLANDS ANTILLIAN GUILDER AOA - KWANZA ARS - ARGENTINE PESO AUD - AUSTRALIAN DOLLAR		
EUR - EURO	1.4800	11/17/2016
CHF - SWISS FRANC	0.1194	11/17/2016

- 6) To edit an existing currency, simply change the selection from the drop down and enter the new conversion rate (rate of conversion from selected currency back to the default currency) directly on the screen. Then click “Save”.

BBD - BARBADOS DOLLAR	
BDT - TAKA	
BGN - BULGARIAN LEV	
BHD - BAHRAINI DINAR	
BIF - BURUNDI FRANC	
BMD - BERMUDIAN DOLLAR	
BND - BRUNEI DOLLAR	
BOB - BOLIVIANO	
BOV - MVDOL	
BRL - BRAZILIAN REAL	
BSD - BAHAMIAN DOLLAR	
BTN - NGULTRUM	
BWP - PULA	
BYB - BELARUSSIAN RUBLE	
BYR - BELARUSSIAN RUBLE	
BZD - BELIZE DOLLAR	
CAD - CANADIAN DOLLAR	
CDF - FRANC CONGOLAIS	
CHE - WIR Euro	
CHF - SWISS FRANC	
CHF - SWISS FRANC	0.850000
AED - UAE DIRHAM	0.000100



2.6.4.2 How to Review Currency History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Default Currency

- 1) Click on the History button on the upper right hand side of the section

Currencies 🌐 - In Central Standard Time

Default Currency 🕒 History

Default currency code	Updated By	Updated Date (MM/DD/YYYY)
USD - US DOLLAR	Lori Button	02/15/2016 08:42:00 AM

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Default Currency Code
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date

- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

Currency Conversion Rates

- 1) Click on the History button on the upper right hand side of the section

Currency	Conversion Rate	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
BOB - BOLIVIANO	0.140000	12/31/2020	Button Lori L	12/31/2019 12:24:31 PM	X
US\$ - US DOLLAR (SAME DAY) FUNDS CD	1.000000	12/31/2020	Button Lori L	12/31/2019 12:24:31 PM	X

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Currency
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.6.5 Generic Parts Configuration

The BUILDER files do not use a specific part number for some fluids like DEO and COOLANT (L). These generic parts are used as placeholders to account for the opportunity value within the larger repair (i.e. DEO within PM 1). Also, these fluids are also not listed or priced on the Dealer Area Parts Pricing File. In order to calculate opportunity, dealers must provide us their local list price for each of these generic parts. The dealer part number or description configuration is only used for sales aggregation.

2.6.5.1 Generic Parts: Impact to Sales Aggregation

The Part Price is used for generating opportunity value.

- A value must be added for every generic part. The field cannot be left blank.
 - Enter a value for Gallons and Liters even if your dealership only uses one.

- For parts that the Dealer only sells in either Liters or Gallons, calculate the converted part price. 1 gallon = 3.78541 liters.
- Part price must be entered in default currency.
- Use your dealership's least expensive price per gallon or liter. This is typically the dealer's bulk rate fluid price.
- The major class and commercial group listed within the configuration page will be used to categorize the opportunity values for that generic part.

2.6.5.2 Generic Parts: Impact to Opportunity Calculation

The Dealer Part Number is used to support sales aggregation.

- Generic Part numbers are used when fluids are sold as a Miscellaneous charge and not as a part line item. OLGA does not bring in Miscellaneous charges, therefore OLGA uses these part numbers entered to search Miscellaneous charges and include these sales amounts in OLGA.
- A part number or part description should be added for each generic part that is sold as a Miscellaneous charge.
- If part numbers are not sold as Miscellaneous charges, the generic part number that is configured will not affect sales processing. Since a value is required in the part number field, enter NoPart.
- Multiple or all part numbers/descriptions can be added for each generic part.
- The appropriate Source of Supply must also be setup if using either the part number or part description for sales aggregation.
- The major class and commercial group will not be used to categorize the sales values of these parts.



Best Practice: If the Dealer's generic parts are not updated 30 days prior to the expiration date, the line item will high-light yellow. Once it has passed the expiration date, the line will appear red.

If the Dealer needs to make any changes to the generic parts, they will first have to update the expiration date before being allowed to make any changes.

Example 1:

The Dealer sells Extended Life Coolant for \$200 for a 100 liter drum (part number 1234567) and Diesel Engine Antifreeze Coolant (DEAC) for \$120 per 50 liters drum (part number 9876543).

Configuration Input: The Dealer should enter 1234567 as the part number for Extended Life coolant with a price of \$2.00 per liter (\$200/100 liters). For Coolant (DEAC), the part number of 9876543 should be entered with a price of \$2.40 per liter (\$120/50 liters).

Example 2:

The Dealer sells Diesel engine oil in gallons for \$21.35 per gallon (part number 1122334). The Dealer does not sell Diesel Engine Oil CH-4.

Configuration Input: The Dealer should enter 1122334 as the part number for Diesel engine oil in gallons, with the part price of \$21.35. For DEO (L), the same part number of 1122334 should be entered, with the converted part price. There are 3.78541 liters in a gallon so the part price should be entered as $\$21.35/3.78541 = \5.64 .

Note: ALL generic parts must have a price.

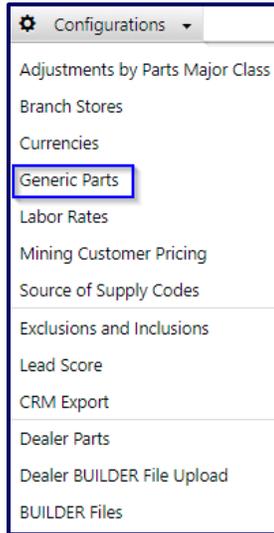
The only exception is SOS if it is sold as a Labor charge.

Generic Parts only need part number(s) if they are sold as a Miscellaneous charge.

2.6.5.1 How to Configure OLGA Generic Parts



1) In the OLGA web application, navigate to the Configuration Menu → Generic Parts



- 2) Type in the Dealer part number and click enter or the PLUS sign
 - a. Click the blue X by the part number to remove it
- 3) Type in the Part Price for each of the listed parts
- 4) Select “Save” at the bottom of the page to save all changes to the page

Part Number	Description	Parts Major Class	Commercial Group	Dealer Part Number (Sales)	Part Price (Opportunities)	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)
COOLANT (DEAC)	Coolant (Liters)	7-F	Fluids		20.00	05/17/2019	Button Lori L	11/17/2018 07:55:14 AM
COOLANT (L)	Extended Life Coolant (Liters)	7-F	Fluids		2.00	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM
DEO	Diesel Engine Oil (Gallons)	7-F	Non-Traditional		40.00	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM
DEO (L)	Diesel Engine Oil (Liters)	7-F	Non-Traditional		10.56	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM
DEO CH-4	Engine Oil (Gallons)	7-F	Non-Traditional		5.00	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM
FDAO	Final Drive and Axle Oil (Gallons)	7-F	Non-Traditional		8.00	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM
FDAO (L)	Final Drive and Axle Oil (Liters)	7-F	Non-Traditional		2.12	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM
GO	Gear Oil (Gallons)	7-F	Non-Traditional		16.00	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM
GREASE	Multipurpose Grease	7-F	Non-Traditional		10.00	05/07/2019	Ioerger Cori L	05/07/2018 03:41:59 PM

2.6.6 Labor Rates Configuration

To calculate labor opportunities, OLGA requires the Dealer's labor rate(s). **At a minimum, Dealers must configure one labor rate for all equipment and all branches.** Branch Hourly Labor Rate allows the Dealer to specify the labor rate at each branch for machines, engines, or both.

Labor costs in OLGA are based on the labor rates configured on this page. Dealer can add, change or delete labor rates at any time. A branch must first be set up in the Branch Configurations page before a labor rate can be applied to it (See [Section 2.6.6](#)).

Labor rates should be a blended rate that accounts for both shop and field labor rates. Many Dealers already have this blended rate for use by the warranty department.

The currency in which the labor rate is nominated will be restricted to the currencies that have been entered into the currencies configuration (See [Section 2.6.4](#)).

Note: If the Dealer's Default Labor Rate and Branch Labor Rates are not updated 30 days prior to the expiration date, the line item will high-light yellow. Once it has passed the expiration date, the line will appear red. If the Dealer needs to make any changes to the Labor rates, they will first have to update the expiration date before allowed to make any changes.

Example 1:

The Dealer has one standard labor rate for all equipment and all customers for \$60 per hour.

Configuration Input: The Dealer should enter \$60 as labor rate in both the machine and engine Default Hourly labor Rate rows. No Branch Hourly Labor Rates are required.0.

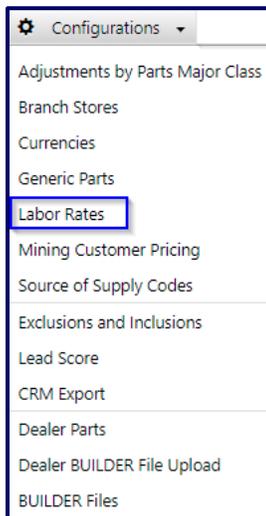
Example 2:

The Dealer changes \$60 per hour for machine labor and \$55 for engine labor in the Kingston branch and \$52 per hour for the engine labor in the California and Queenstown branches.

Configuration Input: In the Default Hourly Labor Rate rows, the Dealer should enter \$60 for machine and \$52 for engines. They should also add a Branch Hourly Labor Rate of \$55 for the Kingston branch.

2.6.6.1 How to Configure Labor Rates

- 1) In the OLGA web application, navigate to the Configuration Menu → Labor Rates



- To change the Default Hourly Labor Rate, select, “Change” to allow for editing of the currency, labor rate values, and expiration dates



- Select the desired currency and type in the applicable Labor Rates. & select “Save”

A screenshot of the 'Default Hourly Labor Rate' table. The table has three columns: 'Equipment', 'Currency', and 'Hourly Labor Rate'. It contains two rows of data.

Equipment	Currency	Hourly Labor Rate
Engine	GBP - BRITISH POUND STERLING	60.00
Machine	GBP - BRITISH POUND STERLING	52.00

- To add branch specific hourly labor rates, select, “Add”



- Select the branch for which labor rate will apply
- Select the equipment type
- Select the currency
- Enter the Hourly Labor Rate
- Select “Save”

A screenshot of the 'Branch Hourly Labor Rate' table. The table has eight columns: 'Branch', 'Equipment', 'Currency', 'Hourly Labor Rate', 'Expiration Date (MM/DD/YYYY)', 'Updated By', 'Updated Date (MM/DD/YYYY)', and 'Delete'. A new entry is being added with the following values: Branch (empty), Equipment: 'Both', Currency (empty), Hourly Labor Rate: '0', Expiration Date: '11/01/2017', Updated By (empty), Updated Date (empty), and Delete (red X).

Branch	Equipment	Currency	Hourly Labor Rate	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
	Both		0	11/01/2017			X

- To edit branch specific hourly labor rates, select the changes you want from the existing drop downs, update the hour labor rate, and select “Save”.

A screenshot of the 'Branch Hourly Labor Rate' table. The table has eight columns: 'Branch', 'Equipment', 'Currency', 'Hourly Labor Rate', 'Expiration Date (MM/DD/YYYY)', 'Updated By', 'Updated Date (MM/DD/YYYY)', and 'Delete'. An existing entry is being edited with the following values: Branch: 'BRANCH 1', Equipment: 'Machine', Currency: 'CHF - SWISS FR', Hourly Labor Rate: '60.00', Expiration Date: '07/11/2017', Updated By: 'Lori Button', Updated Date: '07/11/2016 09:15:36 AM', and Delete (red X).

Branch	Equipment	Currency	Hourly Labor Rate	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
BRANCH 1	Machine	CHF - SWISS FR	60.00	07/11/2017	Lori Button	07/11/2016 09:15:36 AM	X



2.6.6.2 How to Review Labor History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Default Hourly Labor Rate

- 1) Click on the History button on the upper right hand side of the section

Labor Rates 🌐 - In Central Standard Time					
Default Hourly Labor Rate 📄 Change					🕒 History
Equipment	Currency	Hourly Labor Rate	Expiration Date (MM/DD/YYYY) 🌐	Updated By	Updated Date (MM/DD/YYYY) 🌐
Engine	USD - US DOLLAR	110.00	11/30/2016	Lagacy Christopher	10/28/2016 01:43:02 PM
Machine	USD - US DOLLAR	100.00	11/30/2016	Lagacy Christopher	10/28/2016 01:43:02 PM

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Equipment
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

Branch Hourly Labor Rate

- 1) Click on the History button on the upper right hand side of the section

Branch Hourly Labor Rate 📄 Add							
Branch	Equipment	Currency	Hourly Labor Rate	Expiration Date (MM/DD/YYYY) 🌐	Updated By	Updated Date (MM/DD/YYYY) 🌐	Delete
California Branc ▾	Machine ▾	CHF - SWISS FR ▾	60.00	07/11/2017 📅	Lori Button	07/11/2016 09:15:36 AM	✘
Dallas ▾	Both ▾	USD - US DOLL ▾	40.00	10/28/2017 📅	Lagacy Christopher	10/28/2016 01:45:44 PM	✘

- 2) A pop-up window will appear and show the below columns:
 - a. Action

- b. Branch - Equipment
- c. Column Name
- d. Old Value
- e. New Value
- f. Updated By
- g. Updated Date

- 3) The changes are listed in descending chronological order (the most recent change will be at the top)
- 4) Sorting by column is available as shown below:

Branch Hourly Labor Rate

Branch	Equipment	Currency	Hourly Labor Rate	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)
Awesome	Engine	BRL - BRAZILIAN REAL	70.00	12/31/2019	loerger Cori L	03/29/2019 10:43:44 AM
Awesome	Machine	USD - US DOLLAR	0.50	10/31/2019	loerger Cori L	03/29/2019 10:40:19 AM
California Branch	Machine	USD - US DOLLAR	60.00	09/30/2019	loerger Cori L	03/29/2019 10:40:19 AM

2.6.7 Mining Customer Pricing

Mining Customer Pricing allows for the use of an alternative pricing file for select, approved mining customers. These mining customers are considered Corporate or Key Accounts. These Corporate or Key Accounts are pre-populated on the screen to align with information from the Caterpillar Pricing Team. Only select those accounts that are actually used at the dealership. The OLGA DSD Consultant will work with the Dealer’s OLGA Coordinator to ensure this Configuration is set up properly.

The purpose of the Mining Customer Pricing functionality within OLGA is to discount the opportunity data for the customers in a dealer’s territory who are receiving mining prices. This is because the mining prices are discounted or lower than the area parts pricing or suggested consumer list price. Further, when the dealer is sending in mining prices for specific (typically Key Caterpillar Account or Corporate Account) customers, then OLGA will configure those customers in OLGA to receive corresponding discounted opportunity values. For the logic to work, the dealer must code the Key Caterpillar Account or 4 character CDID code on the Customer Record. These CDID codes are entered in the Mining Customer Pricing configuration screen within OLGA. If the customer is not currently a corporate account, then there is an approval process that must be followed to request and gain a Key Caterpillar Account code or CDID code to be used and assigned to the customer data. The intent is to provide the discount for large customers.

The standard logic to generate opportunity is to use the dealer’s local area parts pricing file as the prices, and the quantities and replacement percentages from the builder files. In the case of Mining Customer Pricing, the mining price file is being used instead of the dealer’s local area parts pricing file.

Not all dealers will be able to view the Mining Customer Pricing Configuration. Only those dealers who are approved to use specialized Mining Customer Pricing will be able to view this Configuration. If you are unsure if this Configuration should apply to you, please contact your OLGA DSD Consultant to discuss.

2.6.8.1 How to Configure Mining Customer Pricing

- 1) In the OLGA web application, navigate to the Configuration Menu → Mining Customer Pricing



- 2) To apply Mining Customer Pricing by approved Corporate or Key Account, click the box to add a check mark for the appropriate Corporate or Key Account and select “Save”.
- 3) To remove the Mining Customer Pricing, remove the check mark from the box and select “Save”

2.6.7.2 How to Review Mining Customer Pricing History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Corporate/Key Account	Apply Mining Pricing
Key Account 1 - Key Account #	<input type="checkbox"/>
Key Account 2 - Key Account #	<input type="checkbox"/>
Key Account 3 - Key Account #	<input type="checkbox"/>
Key Account 4 - Key Account #	<input checked="" type="checkbox"/>
Key Account 5 - Key Account #	<input type="checkbox"/>
Key Account 6 - Key Account #	<input checked="" type="checkbox"/>

Mining Customer Pricing

- 1) Click on the History button on the upper right hand side of the section

The screenshot shows a web application window titled "Mining Customer Pricing". At the top right, there is a "History" button. Below the title bar is a table with the following columns: "Corporate/Key Account", "Apply Mining Pricing", "Updated By", and "Updated Date (MM/DD/YYYY)". The table contains three rows of data, each starting with a blue link labeled "Key Account #".

Corporate/Key Account	Apply Mining Pricing	Updated By	Updated Date (MM/DD/YYYY)
Key Account 1 - Key Account #	<input type="checkbox"/>		
Key Account 2 - Key Account #	<input type="checkbox"/>		
Key Account 3 - Key Account #	<input type="checkbox"/>		

- 2) A pop-up window will appear and show the below sortable columns:
 - a. Action
 - b. Corporate/Key Account
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.6.8 Source of Supply Codes Configuration

OLGA requires Dealers to specify which part sales to include based on the Sources of Supply (SOS) for those parts (using SOS codes). The SOS entries can be added, changed or deleted at any time by a dealer administrator. The output for adding SOS will be viewed in the OLGA reports, however, if there are no Sources of Supply configured then the relevant sales event will not show in OLGA or contribute to the Dealer's POPS calculation.

At a minimum, the Caterpillar Source of Supply and the Caterpillar-approved supplier of bulk fluids (oil) must be included. Additional potential SOS configurations may be required based on your dealership's established business practices. Some examples include Cat Used Parts, Dealer Reconditioned Parts, Kits containing Caterpillar Genuine Parts, Classic Parts, PEX (Cat Exchanged Parts), Yellowmark, etc.

SOS in OLGA versus PTOS: If there is a "Y" after the SOS value, like "000Y," then eliminate the "Y". The "Y" used in PTOS is to say "yes, include in calculation." OLGA will include all SOS codes added to the OLGA web application and does not need this additional designation.

Steps for adding Dealer Source of Supply information:

- 1) Add the 3-digit Source of Supply code for all Caterpillar Sources of Supply sales to be included in OLGA.
- 2) Add a description of the Source of Supply code.
- 3) Select "Save."

2.6.8.1 How to Configure SOS Codes

- 4) In the OLGA web application, navigate to the Configuration Menu → Source of Supply Code

Example 1:

A Dealer uses three different Sources of Supply Codes: 000 for Cat parts, EXM for ExxonMobil, and USE for Used Parts.

Configuration Input: The Dealer should configure all three SOS codes so the sales of Cat parts, ExxonMobil, and Used Parts are included in the Dealer’s sales total and POPS calculation.



- 5) To add a Source of Supply code, select, “Add” to enter new lines to enter in the table below

Source of Supply Code

- 6) Type in the SOS code and a description & select “Save”
 - a. Note: Quotation marks are not accepted in either the code or description fields

Source of Supply Code	Description/Reason
199	Test
000	Caterpillar

- 7) To edit the name of a Source of Supply code, type in the new name and select “Save”. **Note that you cannot update the code itself.**



2.6.8.2 How to Review Source of Supply Code History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Source of Supply Code

- 4) Click on the History button on the upper right hand side of the section

Source of Supply Code	Description/Reason	Updated By	Updated Date (MM/DD/YYYY)	Delete
199	Test	Dawn Getz	11/30/2016 12:52:47 PM	✘
000	Caterpillar	Button Lori L	04/09/2016 01:13:42 PM	✘
007	MCC Test-OEM	Costello Megan C	06/13/2018 03:30:42 PM	✘
100	Dealer Rebuild Components - Cat Parts Only	Brianne DeVenney	07/11/2016 01:31:01 PM	✘
110	Dealer Kits - Cat Parts Only	Brianne DeVenney	07/11/2016 01:31:01 PM	✘
123	Generic Parts	Button Lori L	04/09/2016 01:14:38 PM	✘
A1-	Test for Special Character	Dawn Getz	11/30/2016 12:52:30 PM	✘
aaa	cat	Evette Hadzisavas	08/12/2018 10:02:25 PM	✘
abc	Test	Dawn Getz	11/30/2016 12:52:07 PM	✘
c52	Dawn Testing	Dawn Getz	03/22/2017 02:54:32 PM	✘
EMP	Expanded Mining - Entered by OLGA Central Team - Please Update	Aitken Tara	01/09/2018 01:36:24 PM	✘

- 5) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Source of Supply Code
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 6) The changes are listed in descending chronological order (the most recent change will be at the top)

2.6.9 Lead Score Configuration

Lead Score Configurations allow the Dealer Admin to change the emphasis placed on certain values that go into the lead score calculation. OLGA does not require the dealer to edit Lead Score Configurations. The default values are acceptable. However, the dealer may make changes to the weighting of inputs into the lead score. Users may also sort by the Customer Industry, Score, Updated By & Updated Date columns.



Best Practice: Do not change the default weighting for Lead Scoring until you start utilizing the score in a lead qualification and/or sales funnel capacity and have found that the scores for certain opportunities or customers are under or over scored.

2.6.9.1 Customer Industry Tab

The default weighting is set at 2, also known as “medium” weighting. No action is needed to weight the score as a 2 (“medium”). Dealers may change the weighting value to a 1 (a “low” weighting) or a 3 (a “high” weighting). Choosing a 1 (“low”) weighting will put less emphasis on these customers during lead score calculation. Choosing a 3 (“high”) weighting will put more emphasis on these customer industries during lead score calculation. If a score has been changed to a 1 or 3, and the dealer would like to change it back to a 2, then they should delete the configuration from the screen. This will re-set the customer industry back to the default value of 2 (“medium”).

Note: Dealers should change the Customer Industry weighting only for those industries that they choose. Not every industry requires a change from the default. Change only those customer industries that need verifiably more or less focus.

Example 1:

A dealer wants to focus on Pipeline customers in the next year.

Configuration Input: Set the customer industry weighting for Pipeline customers at a higher weight by selecting a 3 for the PL10 – Pipeline customer industry on the Lead Score Configuration page. This will place a higher weight on these customers when calculating the overall lead score.

2.6.9.2 Ranking Tab

The default is set at 50% for each of the 3 options: Customer, Sales Model and Component Code. This means that a higher weight will be given to the customers making up the top 50% of opportunity, the sales models making up the top 50% of opportunity, and the component codes making up the top 50% of opportunity when calculating the lead score. The percentages can be changed to any value between 0%-100%. Note that full parent-child relationships have already been accounted for.

Example 1:

A dealer wants to focus on the top 25% of customers.

Configuration Input: Set the Customer Percentage configuration to 25. This will put a higher weight on the top 25% of customers when calculating the lead score. Compared to the default of 50%, the higher weight will be added to fewer customers.

Example 2:

A dealer wants to focus on the top 60% of sales models.

Configuration Input: Set the Sales Model Percentage configuration to 60. This will put a higher weight on the top 60% of sales models when calculating the lead score. Compared to the default of 50%, the higher weight will be added to more sales models.

2.6.9.3 Opportunity Value Tab

The default value is set at 1,000 of the dealer’s default currency. This means that a higher weight is put on opportunity events with a value set at 1,000 or higher when calculating the lead score.

This value should be reviewed to ensure it makes sense based on the dealer’s default currency. Values can be set between 0-10,000,000,000 (10B) to allow for these currency variances.

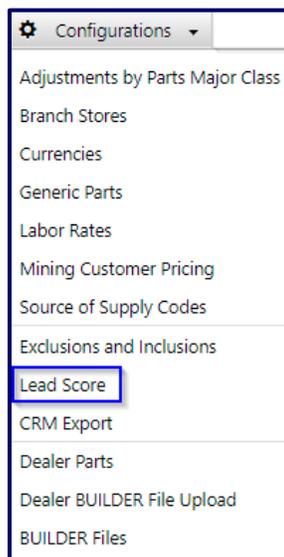
Example 1:

A dealer wants to put a higher emphasis on opportunity events valued at over USD \$5,000.

Configuration Input: Set the Opportunity Value Configuration to 5,000. This will put a higher value on opportunity events value at USD \$5,000 or higher when calculating the lead score.

2.6.9.4 How to Configure Lead Score for Customer Industry

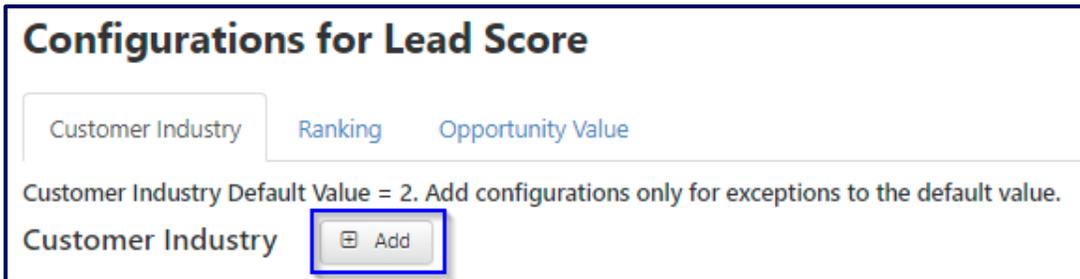
- 1) In the OLGA web application, navigate to the Configuration Menu → Lead Score



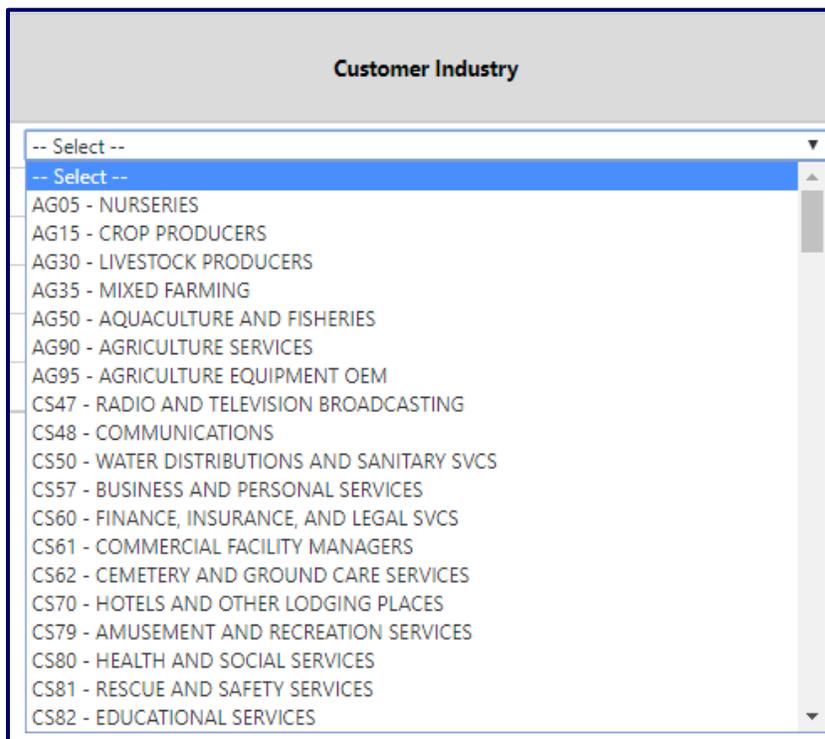
- 2) To edit Customer Industry, navigate to the “Customer Industry” tab to edit the score values by industry
 - a. Default score value is 2. The values can be edited to either 1 or 3.



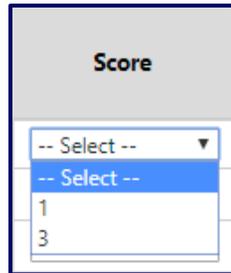
- 3) Click the “Add” button



- 4) Select the Customer Industry

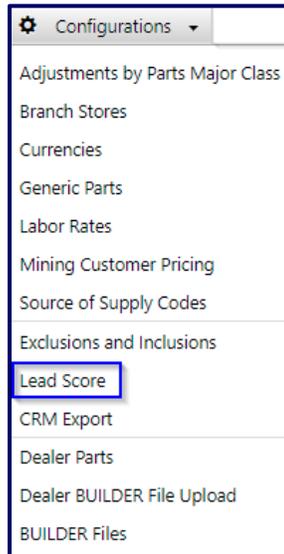


5) Select the new score value & select “Save”.



2.6.9.5 How to Configure Lead Score for Ranking

1) In the OLGA web application, navigate to the Configuration Menu → Lead Score



2) To edit Ranking, navigate to the “Ranking” tab to edit the score values by Ranking
 a. Default percentages for Customer, Sales Model, & Component Code are 50%

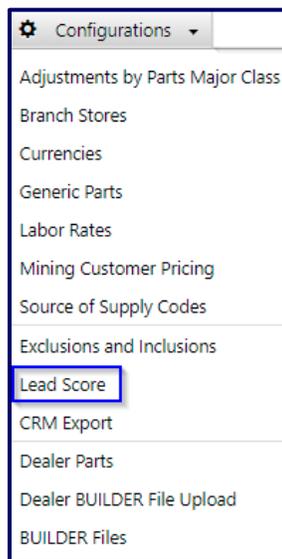


3) Edit the percentage number for Customer, Sales Model, and/or Component Code & select “Save”

Customer Percentage	Sales Model Percentage	Component Code Percentage
<input type="text" value="30"/> %	<input type="text" value="50"/> %	<input type="text" value="70"/> %

2.6.9.6 How to Configure Lead Score for Opportunity Value

- 1) In the OLGA web application, navigate to the Configuration Menu → Lead Score



- 2) To edit Opportunity Value, navigate to the “Opportunity Value” tab to edit the score values by industry
 - a. Default value is 1,000

Configurations for Lead Score

Customer Industry
Ranking
Opportunity Value

- 3) Input the opportunity value & select “Save”
 - a. Can input any number between 1-10,000,000,000 (10B)
 - b. Amount is in default currency

Opportunity Value (In default currency)

3,000



2.6.9.7 How to Review Lead Score History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Customer Industry

- 1) Click on the History button on the upper right hand side of the section

Configurations for Lead Score 🌐 - In Central Standard Time

Customer Industry Ranking Opportunity Value

Customer Industry Default Value = 2. Add configurations only for exceptions to the default value.

Customer Industry Add History

Customer Industry	Score	Updated By	Updated Date (MM/DD/YYYY)	Delete
AG15 - CROP PRODUCERS	3	Button Lori L	05/09/2018 10:06:03 AM	✖
GV87 - EDUCATION & TRAINING	1	Button Lori L	05/10/2018 04:25:09 PM	✖
LL45 - PAVING CONTRACTOR	1	Button Lori L	05/09/2018 10:06:03 AM	✖

Save Cancel

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Customer Industry
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

Ranking

- 1) Click on the History button on the upper right hand side of the section

Configurations for Lead Score 🌐 - In Central Standard Time

Customer Industry Ranking Opportunity Value

Please specify a percentage (0-100) for each of the following opportunity categories. Default values are set at 50%.

Ranking configuration [History](#)

Customer Percentage	Sales Model Percentage	Component Code Percentage	Updated By	Updated Date (MM/DD/YYYY)
<input type="text" value="30"/> %	<input type="text" value="50"/> %	<input type="text" value="70"/> %	Brianne DeVenney	11/01/2017 10:37:06 AM

[Save](#) [Cancel](#)

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Key
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

Opportunity Value

- 1) Click on the History button on the upper right hand side of the section

Configurations for Lead Score 🌐 - In Central Standard Time

Customer Industry Ranking Opportunity Value

Please specify a value with in range (1-10,000,000,000) for opportunity value. Default value is 1,000 in default currency.

Opportunity Value Configuration [History](#)

Opportunity Value (In default currency)	Updated By	Updated Date (MM/DD/YYYY)
<input type="text" value="3,000"/>	Brianne DeVenney	11/01/2017 10:37:58 AM

[Save](#) [Cancel](#)

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Key
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7 Inclusions & Exclusions

This section is used to define customers and equipment that should be Excluded from OLGA reports. By default, OLGA will Include sales for Cat parts for all configured SOS codes and labor to Cat equipment for all customers in the Dealer’s customer file. It will also, by default, calculate opportunity for every serial number in the Dealer’s equipment file assuming there is a valid BUILDER file and SMU value (either actual or calculated).

To manage the sales Included in OLGA, dealers must use the Exclusion and/or Inclusion configurations to control which sales are accounted for in the system. These sales should be for equipment where opportunities are calculated.

OLGA will first apply all Exclusions for all categories, then every Inclusion is applied. Fields are not validated within the Exclusion or Inclusion configuration. As such, Dealers should use the Exclusion and Inclusion parameters in combination to most efficiently achieve the desired result.

Dealers must maintain an accurate customer and equipment list in their ERP system and should not be using OLGA configurations in replacement of ensuring accurate ownership information in the source ERP system.

Each Exclusion parameter is described in detail in the following sections.

Exclusions and Inclusions												
Inactive Customer	Customer Type	Contains Alpha Character	Customer Range	Division	Industry	Store Number	County/State	Customer Location	Sales Rep	Serial Number	Equipment Territory	Equipment Activity

Note: If the Dealer’s Inclusions or Exclusions are not updated 30 days prior to the expiration date, the line item will highlight yellow. Once it has passed the expiration date, the line will appear red. If the Dealer needs to make any changes to the exclusion, they will first have to update the expiration date before making any changes.

Inclusion and Exclusion Requirements

Dealers to Include: If there is a legitimate chance to sell Cat parts to the customer, include the customer in OLGA, even if the Dealer has no current opportunity to make sales. The following circumstances should be included:

- Customers in territory, with active equipment
- Dealer rental fleet and rental customers
- Expanded Mining Product (EMP) and On-Highway Truck Engines
- Transient customers where more than 25% of their activity is within the established Dealer territory (e.g. Truck and Marine)
- Parked equipment
- Sales:
 - Cat Source of Supply (including EMP), Exxon/Mobil fluids (oil)
 - Cat used parts, dealer reconditioned parts, kits containing Cat parts, Yellowmark, etc.
 - EPP

Dealers to Exclude: If the customer is **not** a revenue customer, the customer should be excluded. If the dealer does not have visibility to the equipment, the equipment should be excluded. The following circumstances should be Excluded:

- Caterpillar Inc. and other Cat Dealers
- Out of business customer accounts
- Transient customers where less than 25% of their activity is within the established Dealer territory
- Internal Customer Accounts:
 - Internal CSA/MARC accounts
- Second Level Dealers and Resellers (e.g. TEPS, AMD, Resellers, Auctioneers)
- Sales:
 - Competitive parts (e.g. Donaldson filters)
 - Non-Cat approved oil sources (regardless of customer preference)
 - Warranty (these sales occur outside the repair cycle)
 - Goodwill parts

Note: Depending on the Dealer's working environment, there might be an exception to one of these rules. If there is an exception, contact your OLGA DSD Consultant to better understand how that would look in your configuration(s) and submit a business case for Governance approval.

2.7.1 Determining Which Exclusions/Inclusions to Use

2.7.1.1 Points to Consider

- **Exclusions should not be based on age of equipment:** Utilization Rate will adjust the opportunities as needed. Validation of equipment should be done to determine Exclusion.
- If there is **no chance to sell parts** to one of the customer's machines or engines, the serial number should be *Excluded* from OLGA (the effective result being that the customer remains in OLGA but the serial number(s) owned by that customer is Excluded). For example:
 - Serial number has permanently moved out of territory
 - Serial number has been scrapped
- **OEM Population Inclusion**
 - If a Dealer is actively tracking and managing both the population and the parts sales for aftermarket parts, they should Include this equipment in their population.
- **Internal Customer Accounts Exclusions**
 - If the customer being Included in OLGA will cause double counting of invoices, the customer should be Excluded. For example:
 - Internal accounts
 - Internal parts transfer accounts
- **Entire Customer Exclusion**
 - If there is less than a 25% chance to sell parts to the customer, then the entire customer should be Excluded from OLGA (the effective result being that all of the customer's equipment is Excluded). For example:
 - Customer has permanently moved out of territory
 - Customer has gone out of business (inactive customers)

2.7.1.2 Data Structure for Exclusions

Exclusion options fall into different levels. That is, different Exclusions have a different type of impact on the data. Some Exclusions will remove a single serial number, while others will remove an entire customer or division. Also, some Exclusions can have more than one application depending on how it is used.

Level 1 Exclusion

These Exclusions will remove a customer or multiple customers.

- Inactive Customer Exclusion – **Section 2.7.2**
- Customer Type – **Section 2.7.3**
- Contains Alpha Character – **Section 2.7.4**
- Customer Number Range – **Section 2.7.5**
- Customer Store Number – **Section 2.7.8**

- County/State – **Section 2.7.9**
- Customer Territory (Location) – **Section 2.7.10**

Example 1:

Internal Account (non-revenue) – I is used by the Dealer to categorize all internal accounts that do not generate revenue and should be excluded.

Configuration Input: The Dealer should enter an exclusion for the customer type I - Internal Account (non-revenue) to exclude all customers categorized with I.

Example 2:

Customer 44 operates mostly out of territory. It came to this Dealer A in the past a few times, but the customer is transient and operates mostly (as in, transacts more than 25% of its business) in another Dealer B's territory. Dealer A should exclude this Customer 44.

Configuration Input: The Dealer should enter an exclusion for Inactive Customer and also mark this customer as Inactive in their ERP system.

Level 2 Exclusion

These Exclusions will remove entire groups of equipment or groups of customers.

- Division Code – **Section 2.7.6**
- Customer Industry – **Section 2.7.7**
- Sales Rep – **Section 2.7.11**

Example 1:

Division Code X is used by the Dealer to categorize customers who have gone out of business. There are 100 customers assigned to Division Code X and all should be excluded from OLGA except ABC Contracting (customer number = 1000012).

Configuration Input: The Dealer should enter an exclusion for Division Code X and an inclusion for customer number 1000012. (Alternatively the Dealer could enter 99 customer exclusions but this would not be as efficient.)

Level 3 Exclusion

These Exclusions will remove a piece or pieces of equipment

- Equipment by Serial Number and Customer Number – **Section 2.7.12**
- Equipment by Territory – **Section 2.7.13**
- Equipment by Activity – **Section 2.7.14**

Example 1:

Customer 23 has a piece of equipment AAA5555. This equipment has been scrapped and should be excluded.

Configuration Input: The Dealer should enter an Exclusion by Serial Number for equipment AAA5555.

2.7.2 Inactive Customer Exclusion

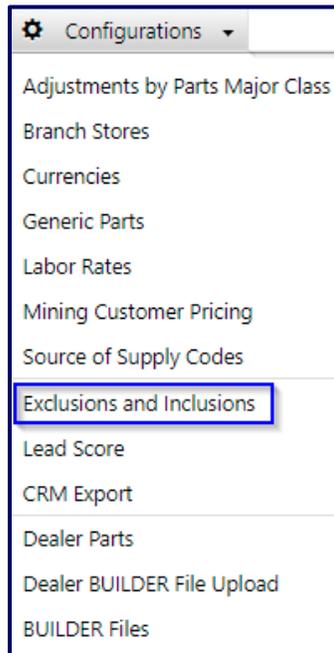
Include ALL customers using Caterpillar equipment. This Includes customers that are no longer doing business with a Dealership, but continues to use Caterpillar equipment, they should be labeled as Active Customers.

Exclude ALL customers who no longer have Caterpillar equipment, have left Dealer's territory or have gone out of business. All customers identified as inactive will not be shown in OLGA reports.

Additionally, this Exclusion parameter allows DBS Dealers to Exclude customers based on the Flag Delete field in DBS (File = CIPNAME0, Field = FLGDLI). If the Dealer uses the Flag Delete Indicator in DBS to label customers as inactive, this configuration in OLGA can be used to Exclude those inactive customers.

2.7.2.1 How to Use the Inactive Customer Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



- 2) Navigate to the Inactive Customer tab

Inactive Customer				
Action Type	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)

- 3) If the Flag Delete field in DBS is used to represent the customer being inactive:

- a. Select the check box under Action Type and write a description for the Exclusion & select “Save”

Inactive Customer		
Action Type	Description	Expiration Date (MM/DD/YYYY)
<input checked="" type="checkbox"/> Exclude	Exclude Inactive Customers	11/24/2015

- 4) If the Flag Delete field is **not** used to represent the customer being inactive, the Dealer should not apply this Exclusion in OLGA
 - a. Leave the check box under Action Type unchecked & select “Save”

Inactive Customer		
Action Type	Description	Expiration Date (MM/DD/YYYY)
<input type="checkbox"/> Exclude		11/24/2015



2.7.2.2 How to Review Inactive Customer History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Inactive Customer

- 1) Click on the History button on the upper right hand side of the section

Inactive Customer				
Action Type	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)
<input checked="" type="checkbox"/> Exclude	Exclude Inactive Customers	02/26/2017	Lori Button	02/26/2016 10:37:08 AM

History

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Key
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.3 Customer Type Inclusion or Exclusion

For Exclusion parameters, Dealers may Exclude or Include customers by type, as assigned by the Dealer. Select Exclude or Include and identify the Customer Type (R, I, ASSC, P, W, O).

- R – Revenue Account
- I – Internal Account (non-revenue)
- ASSC – Second Level Dealer (Includes TEPS)
- P – Prospect Account
- W – Warranty Account
- O – Other

The customer types are mapped to each Dealer. For DBS Dealers, this is done using a combination of the PACC, IVTYPI, and TPDLCD fields from the CIPNAME0 file. **Please consult your OLGA DSD Representative to clarify how these fields were mapped in the ETL process.**

The Dealer must chose to either Exclude or Include all divisions and all equipment associated with that customer type. Add the Exclusion or Inclusion type(s).

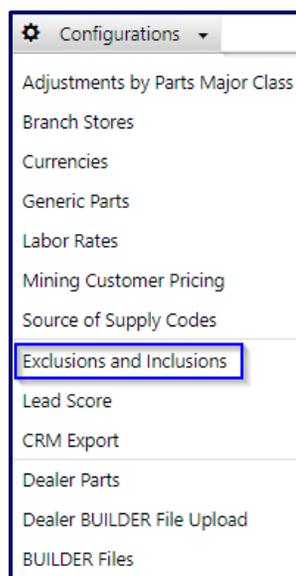
Example 1:

A Dealer needs to remove internal and warranty accounts from OLGA to avoid double counting of invoices.

Configuration Input: The Dealer should enter a customer type exclusion for each of the internal accounts and warranty accounts.

2.7.3.1 How to Use the Customer Type Inclusion or Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



2) Navigate to the Customer Type tab

Customer Type

Page : 1 | Total Record(s) : 6 | Show 100 Records

Action Type	Customer Type	Description	Expiration Date (MM/DD/YYYY)
-------------	---------------	-------------	------------------------------

3) Select "Add" to configure an Inclusion or Exclusion for Customer Type and a new blank line will be entered in the table below.

Customer Type

4) Select whether the action should be an Inclusion or Exclusion

Action Type

Include

Exclude

5) Define the customer type, enter a reason for the Exclusion in the Description section, and select "Save"

Customer Type

Page : 1 | Total Record(s) : 6 | Show 100 Records

Action Type	Customer Type	Description	Expiration Date (MM/DD/YYYY)
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	ASSC - Second level deal Dealer		03/23/2017
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	I - Internal Account (non revenue	Exclude all Internal Accounts	01/01/2017
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	O - Other		03/22/2017
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	P - Prospect Account		04/09/2017
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	R - Revenue Account (end custon	Test Account	12/01/2016
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	W - Warranty Account		09/02/2017

Best Practice: If the Dealer will enter multiple exclusions or inclusions, the user can select “Add” multiple times to create multiple blank row entries before completing the selections and information in the rows.

2.7.3.2 How to Review Customer Type History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Customer Type

- 1) Click on the History button on the upper right hand side of the section

Customer Type Add						
Page : 1 Total Record(s) : 5 Show 100 Records						
Action Type	Customer Type	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	ASSC - Second lev		03/23/2017	Lori Button	04/09/2016 11:07:06 AM	✘
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	I - Internal Accoun	Exclude all Internal Acc	07/31/2017	Lori Button	09/20/2016 08:43:51 AM	✘

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Customer Type
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.4 Contains Alpha Character Exclusion

For Dealers who use numeric customer numbers for normal revenue accounts and alpha or alphanumeric customer numbers for non-revenue accounts, this Exclusion parameter allows the Dealer to easily Exclude the non-revenue accounts.

This Exclusion acts as a switch:

If Set – All accounts that contain any alpha characters in the customer number will be Excluded from OLGA. **If Not Set** – The Exclusion will not apply.

Example 1:

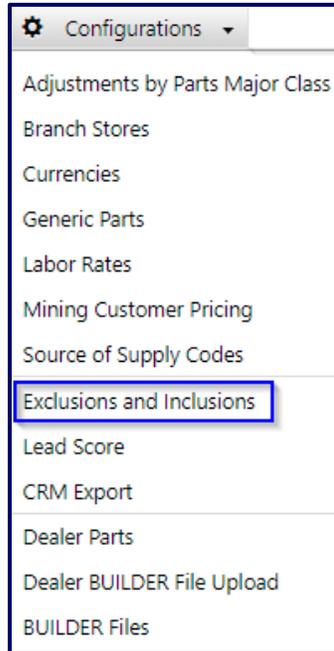
A Dealer needs to remove internal accounts which contain an alphanumeric characteristic in the customer number.

Configuration Input: The Dealer should enable the "Contains Alpha Character" exclusion.

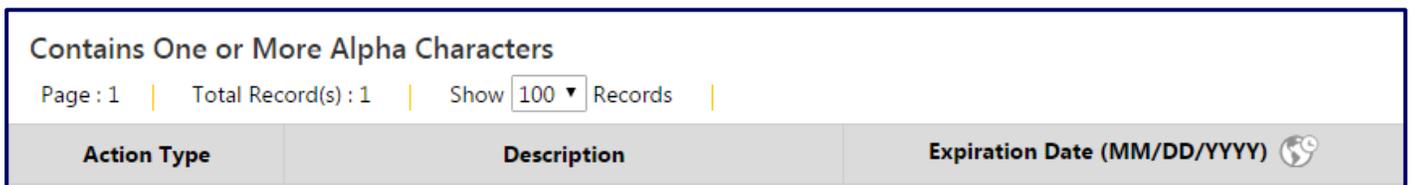
2.7.4.1 How to Use the Contains Alpha Character Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions





- 2) Navigate to the Contains Alpha Character tab
- 3) If the Dealer uses alpha or alphanumeric customer numbers only for a group of customers that should be Excluded from OLGA (e.g. internal accounts, warranty accounts, out of territory accounts), then this Exclusion should be applied
 - a. Select the Exclude check box under 'Action Type' and enter a description or reason for the Exclusion & select "Save"



- 4) If the Dealer does not use alpha or alphanumeric customer numbers only for a group of customers that should be Excluded from OLGA, then this Exclusion configuration should not be used



2.7.4.2 How to Review Alpha Characters History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Contains One or More Alpha Characters

- 1) Click on the History button on the upper right hand side of the section

Contains One or More Alpha Characters				
Action Type	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)
<input checked="" type="checkbox"/> Exclude	Exclude customers containing alpha	07/11/2017	Lori Button	07/11/2016 01:44:27 PM

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Key
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.5 Customer Number Range Inclusion or Exclusion

OLGA enables the Inclusion or Exclusion of individual customer numbers or ranges of customer numbers. Both a beginning and ending customer number must be entered in the Inclusion or Exclusion configuration. Note that the ending customer number must be greater than or equal to the beginning customer number. If only one customer number is being Included or Excluded, the same customer number should be entered in both the beginning customer and ending customer.

For numeric customer numbers, the range will be applied only within range that contain the same number of digits in the customer number.

Example 1:

Customer numbers 100 to 9999 should be excluded from OLGA.

Configuration Input: The Dealer must enter two range exclusions given that the number of digits in the customer number range extends from 3 to 4. The two exclusions should be for range 100 to 999 and for range 1000 to 9999.

Similarly, for alphanumeric customer numbers, the Inclusion or Exclusion range needs to be specified for each unique alpha character combination.

Example 2:

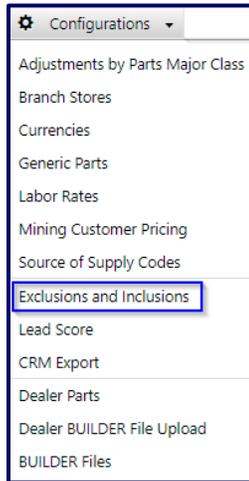
Customer numbers AAA0001 to AAB9999 should be excluded from OLGA.

Configuration Input: The Dealer must enter two range exclusions given that the combination of alpha characters differs within the exclusion range. The two exclusions should be for range AAA0001 – AAA9999 and for range AAB0001 – AAB9999.

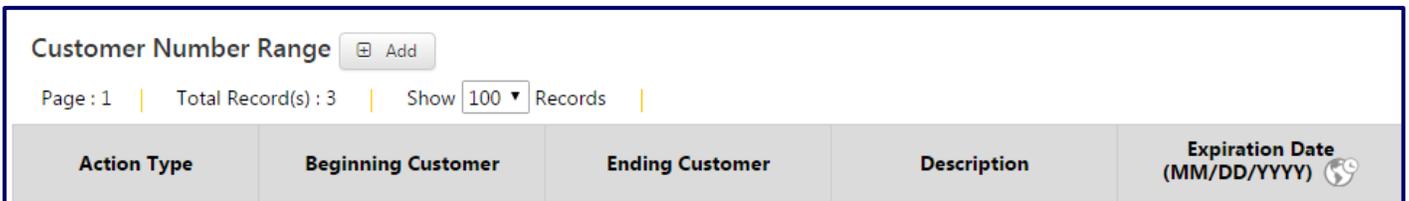
2.7.5.1 How to Use the Customer Number Range Inclusion or Exclusion



- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



- 2) Navigate to the Customer Range tab



- 3) Select “Add” to enter blank lines to the section

Customer Number Range

4) Enter the customer number range Inclusion or Exclusion and a description & select "Save"

Customer Number Range

Page : 1 | Total Record(s) : 3 | Show Records |

Action Type	Beginning Customer	Ending Customer	Description
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="100"/>	<input type="text" value="9999"/>	<input type="text" value="Excluded because...."/>
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="1234567"/>	<input type="text" value="A0000001"/>	<input type="text" value="A9999999"/>
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="AAA0001"/>	<input type="text" value="AAA9999"/>	<input type="text" value="Excluded because...."/>



2.7.5.2 How to Review Customer Number Range History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Customer Number Range

1) Click on the History button on the upper right hand side of the section

Customer Number Range ⊞ Add							History
Page : 1		Total Record(s) : 4		Show 100 Records			
Action Type	Beginning Customer	Ending Customer	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	100	9999	Excluded because...	11/30/2016	Lori Button	10/08/2016 12:24:20 PM	✘
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	1234567	A0000001	A9999999	07/11/2017	Lori Button	07/11/2016 01:47:18 PM	✘

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Beginning Customer – Ending Customer
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.6 Division Code Inclusion or Exclusion

An entire division of customers can be Included or Excluded using this configuration. OLGA will Include or Exclude all customers and equipment associated with the division.

If the customer has multiple division records and one of those divisions is Excluded from OLGA, only the equipment assigned to that division will be Excluded. The customer will remain in OLGA with the equipment under the customer’s other divisions.

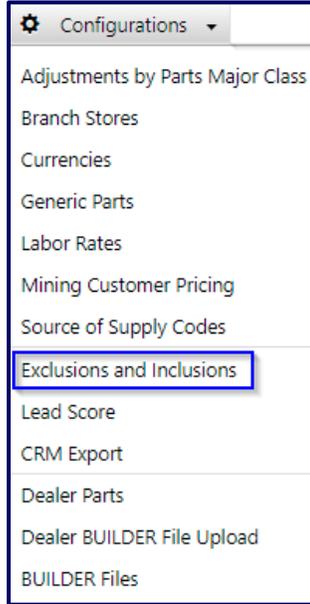
Example 1:

Dealer assigns all equipment for which they do not know the owner to division X and wished to exclude division X from OLGA.

Configuration Input: The Dealer should enter a division code exclusion for division X.

2.7.6.1 How to Use the Division Code Inclusion or Exclusion

1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



2) Navigate to the Division tab



3) Select "Add" to enter blank lines into the table



4) Enter the division code Exclusion and a description/reason & select "Save"

Division Code Add

Action Type	Division Code	Description	Expiration Date (MM/DD/YYYY)
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="X"/>	<input type="text" value="Unknown owner"/>	<input type="text" value="07/01/2016"/>



2.7.6.2 How to Review Division Code History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Division Code

- 1) Click on the History button on the upper right hand side of the section

Division Code Add History

Page : 1 | Total Record(s) : 2 | Show 100 Records

Action Type	Division Code	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="D"/>	<input type="text" value="Lift"/>	<input type="text" value="04/09/2017"/>	Lori Button	05/06/2016 02:15:18 PM	✖
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="L"/>	<input type="text" value="Logistics"/>	<input type="text" value="04/09/2017"/>	Lori Button	05/06/2016 02:15:18 PM	✖

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Division Code
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.7 Customer Industry Inclusion or Exclusion

This configuration allows Dealers to Include or Exclude a primary industry; for example Aggregate Recycling (QA60) or Forestry Lumber Mills (FY40).

Where a customer has multiple divisions with different primary industries for those divisions, this Inclusion or Exclusion configuration will only apply to the defined divisions associated with the industry Inclusion or Exclusion.

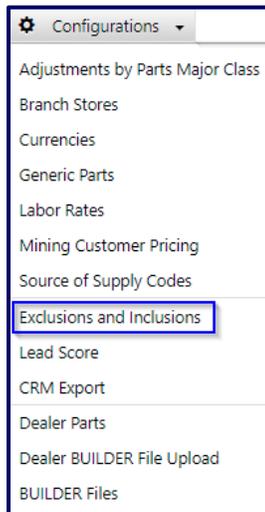
Example 1:

Asphalt Production Industry (LG40) should be excluded from OLGA.

Configuration Input: The Dealer should enter an industry exclusion for LG40. This will exclude customer divisions with that primary industry. If a customer has a machine division with industry LG40 and an engine division with industry Truck Manufacturers OEM (ST95), only the equipment associated with the customer's machine division will be excluded from OLGA.

2.7.7.1 How to use the Customer Industry Inclusion or Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



- 2) Navigate to the Industry tab

Action Type	Industry	Description	Expiration Date (MM/DD/YYYY)
<p>Customer Industry Add</p> <p>Page : 1 Total Record(s) : 5 Show 100 Records</p>			

3) Select “Add” to enter blank lines into the table

Customer Industry

4) Enter the customer industry Inclusion or Exclusion and a description & select “Save”

Action Type	Industry	Description	Expiration Date (MM/DD/YYYY)
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	LG40	Asphalt Production	07/01/2016 <input type="button" value="Calendar"/>



2.7.7.2 How to Review Customer Industry History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Customer Industry

1) Click on the History button on the upper right hand side of the section

Action Type	Industry	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	EQ10		03/07/2017 <input type="button" value="Calendar"/>	Lori Button	03/07/2016 10:43:29 AM	<input checked="" type="checkbox"/>
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	EQ20		03/07/2017 <input type="button" value="Calendar"/>	Lori Button	03/07/2016 10:43:29 AM	<input checked="" type="checkbox"/>

2) A pop-up window will appear and show the below columns:

- a. Action
- b. Industry
- c. Column Name
- d. Old Value
- e. New Value
- f. Updated By
- g. Updated Date

- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.8 Customer Store Number Inclusion or Exclusion

This configuration enables the Inclusion or Exclusion of an entire store. When an Inclusion or Exclusion is applied, all customers assigned to that store will be Included or Excluded in OLGA.

This will apply to all divisions and equipment associated with those customers.

Best Practice: Dealers should prioritize ensuring data is up-to-date and correct in their ERP system rather than using Exclusion parameters in OLGA.

The example above demonstrates how this configuration works but should not be a standard practice for the Dealer. When stores/branches change, Dealers should update their customer assignments in their ERP system.

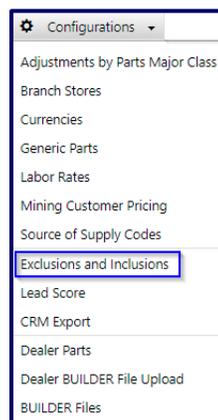
Example 1:

Store 21 was merged into Store 20 last year. All active customers were moved to store 20, but a handful of inactive customers remain associated with store 21.

Configuration Input: The Dealer should enter a store number exclusion for store 21.

2.7.8.1 How to use the Customer Store Number Inclusion or Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



- 2) Navigate to the Store Number tab

Customer Store Number

Page : 1 | Total Record(s) : 1 | Show 100 Records

Action Type	Store Code	Description	Expiration Date (MM/DD/YYYY)
-------------	------------	-------------	------------------------------

3) Select Add to enter blank lines into the table

Customer Store Number

4) Enter the store number Inclusion/Exclusion and a description & select "Save"

Customer Store Number

Action Type	Store Code	Description	Expiration Date (MM/DD/YYYY)
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="21"/>	<input type="text" value="Merged with Store 20"/>	<input type="text" value="07/01/2016"/>



2.7.8.2 How to Review Customer Store Number History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Customer Store Number

1) Click on the History button on the upper right hand side of the section

Customer Store Number

Page : 1 | Total Record(s) : 1 | Show 100 Records

Action Type	Store Code	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="65"/>	<input type="text" value="No longer in business"/>	<input type="text" value="08/11/2016"/>	Lori Button	07/11/2016 01:51:48 PM	<input checked="" type="checkbox"/>

2) A pop-up window will appear and show the below columns:
 a. Action

- b. Store Code
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.9 County/State Code Inclusion or Exclusion

This configuration can be used to Include or Exclude all customers assigned to a county and/or state.

If a customer is Excluded based on a county and/or state Exclusion, all divisions and equipment associated with that customer will be Excluded from OLGA.



Best Practice: To determine whether it is appropriate to use this Inclusion/Exclusion parameter, Dealers should first understand how the county and state fields are mapped from their ERP systems.

This is particularly the case for Dealers in countries where state and county may not be the standard geographic hierarchies. Contact your DSD OLGA Consultant to verify your mapping of these fields.

Dealers should prioritize ensuring data is up-to-date and correct in their ERP system rather than using Exclusion parameters in OLGA.

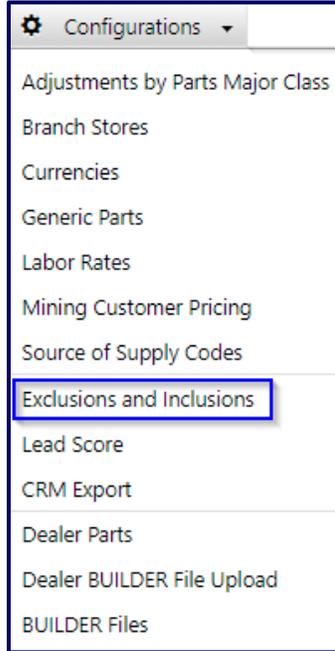
Example 2:

Customers in the state of Pennsylvania (PA) should be excluded from OLGA.

Configuration Input: The Dealer should enter an exclusion for State = PA. It is not required to enter county details. This exclusion will exclude all counties in Pennsylvania.

2.7.9.1 How to use the County/State Code Inclusion or Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



- 2) Navigate to the County/State tab



- 3) Select “Add” to enter blank lines into the table



- 4) Enter the County/State Code Inclusion or Exclusion and a description & select “Save”

County/State Code

Action Type	County	State	Description
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="Peoria"/>	<input type="text" value="IL"/>	<input type="text" value="Out of Territory Location"/>
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text"/>	<input type="text" value="PA"/>	<input type="text" value="Out of Territory Location"/>



2.7.9.2 How to Review County/State Code History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

County/State Code

- 1) Click on the History button on the upper right hand side of the section

County/State Code

Page : 1 | Total Record(s) : 2 | Show 100 Records

Action Type	County	State	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="Peoria"/>	<input type="text" value="IL"/>	<input type="text" value="Out of Territory Lo"/>	<input type="text" value="03/31/2016"/>	Lori Button	02/10/2016 02:22:47 PM	<input checked="" type="checkbox"/>
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text"/>	<input type="text" value="PA"/>	<input type="text" value="Out of Territory Lo"/>	<input type="text" value="03/31/2016"/>	Lori Button	02/10/2016 02:22:47 PM	<input checked="" type="checkbox"/>

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. County – State
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.10 Customer Territory (Location) Inclusion or Exclusion

OLGA enables the Inclusion or Exclusion of a customer based on the location description of that customer, as defined in the Dealer’s ERP system. **Note:** Be sure to use the location description rather than the code.

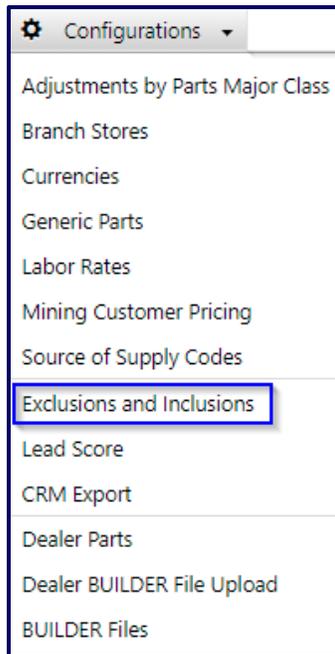
Example 1:

Customers with location descriptions “Unknown” and “North East” should be excluded from OLGA.

Configuration Input: The Dealer should enter two Customer Territory (Location) exclusions for the Unknown location and the North East location.

2.7.10.1 How to use the Customer Territory (Location) Inclusion or Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



2) Navigate to the Customer Location tab

Customer Territory (Location) - Use the location description, not the code Add

Page : 1 | Total Record(s) : 8 | Show Records

Action Type	Customer Territory (Location)	Description	Expiration Date (MM/DD/YYYY)
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3) Select “Add” to enter blank lines into the section

Customer Territory (Location) - Use the location description, not the code Add

4) Enter the customer territory Inclusion/Exclusion and a description & select “Save”

Customer Territory (Location) - Use the location description, not the code Add

Action Type	Customer Territory (Location)	Description	Expiration Date (MM/DD/YYYY)
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	<input type="text" value="Unknown"/>	<input type="text" value="Out of Territory"/>	<input type="text" value="12/02/2015"/>



2.7.10.2 How to Review Customer Territory (Location) History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Customer Territory (Location)

1) Click on the History button on the upper right hand side of the section

Customer Territory (Location) - Use the location description, not the code Add History

Page : 1 | Total Record(s) : 8 | Show Records

Action Type	Customer Territory (Location)	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	FLAGGED FOR DELETI	<input type="text"/>	<input type="text" value="04/09/2017"/>	Lori Button	04/09/2016 10:57:04 AM	
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	Location 6	Location 6	<input type="text" value="08/02/2016"/>	Lori Button	08/02/2015 10:19:32 AM	

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Customer Territory (Location)
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.11 Sales Rep Inclusion or Exclusion

This configuration enables Dealers to Include or Exclude a primary sales representative. In case of multiple sales reps per division, the following priority sequence rule will be applied to define the **Primary Sales Rep**:

- 1) P = Product Support
- 2) A = Account Rep
- 3) I = ISR
- 4) M = Machine
- 5) E = Engine
- 6) R = Rental
- 7) H = Hydraulic Specialist
- 8) U = Undercarriage Specialist
- 9) G = GET Specialist
- 10) O = Other

When a Sales Rep Exclusion is applied for a customer, only the customer equipment assigned to the division associated with that sales rep will be Excluded. For example, a customer has a Product Support Rep assigned to their machine division and an Engine Rep assigned to their engine division. If the Engine Rep is Excluded from OLGA, then this customer's engine division will be Excluded from OLGA but the customer's machine division will remain Included.

Example 1:

Sales Rep 123 moved into a new role within the Dealership and is no longer a customer rep. This Sales Rep still has a small number of out of business accounts assigned to her that the Dealer hasn't yet re-assigned or flagged as out of business in the ERP system.

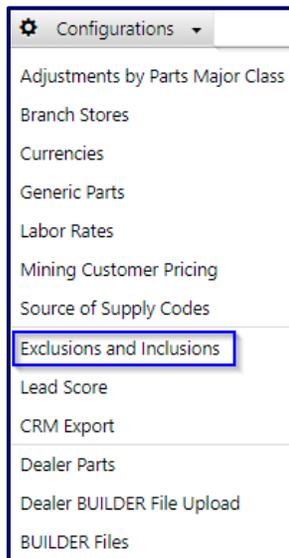
Configuration Input: The Dealer should enter a Sales Rep Exclusion for Sales Rep number 123.



Best Practice: Dealers should prioritize ensuring data is up-to-date and correct in their ERP system rather than only using Exclusion parameters in OLGA. The example above demonstrates how the configuration works but should not be a standard practice for the Dealer. When sales representatives change, Dealers should update their customer assignments in their ERP system.

2.7.11.1 How to use the Sales Rep Inclusion or Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



2) Navigate to the Sales Rep tab

Sales Rep

Page : 1 | Total Record(s) : 0 | Show 100 Records

Action Type	Sales Rep	Description	Expiration Date (MM/DD/YYYY)
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3) Select "Add" to enter blank lines into the table

Sales Rep

4) Enter the Sales Rep Inclusion or Exclusion and a description & select "Save"

- a. Sales Rep Dropdown Selection → Sales Rep must be identified using a Sales Rep Number, Sales Rep Name, and Sales Rep Type

Sales Rep

Action Type	Sales Rep Number	Description	Expiration Date (MM/DD/YYYY)
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	123	No longer a Sales Rep	07/01/2016



2.7.11.2 How to Review Sales Rep History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Sales Rep

1) Click on the History button on the upper right hand side of the section

Sales Rep

Page : 1 | Total Record(s) : 1 | Show 100 Records

Action Type	Sales Rep	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	140-SalesRep-Maci	Kristin Freidinger	10/03/2017	Lori Button	10/03/2016 02:29:50 PM	✘

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Sales Rep
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.12 Equipment by Serial Number and Customer Number Inclusion or Exclusion

This configuration is used to Include or Exclude define serial numbers, when associated with customers. The Inclusion or Exclusion will only apply for the period during which the serial number is associated with the specified customer. For example, OLGA is configured to Exclude serial number 4TR12345 while it is owned by customer 100029. If customer 100029 sells serial number 4TR12345 to customer 100112, this Exclusion will no longer be applied.

Example 1:

Serial number 4TR12345, when owned by customer 100029, should be excluded from OLGA as the machine is being operated outside of the Dealer's territory.

Configuration Input: The Dealer should enter a Serial Number exclusion for 4TR12345, specifying that it applies to customer 100029.

2.7.12.1 How to use the Equipment by Serial Number and Customer Number Inclusion or Exclusion

- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



The screenshot shows a dropdown menu titled 'Configurations' with a gear icon. The menu items are: Adjustments by Parts Major Class, Branch Stores, Currencies, Generic Parts, Labor Rates, Mining Customer Pricing, Source of Supply Codes, Exclusions and Inclusions (highlighted with a blue box), Lead Score, CRM Export, Dealer Parts, Dealer BUILDER File Upload, and BUILDER Files.

- 2) Find Equipment by Serial Number and Customer Number table.

The screenshot shows the header of a table titled 'Equipment by Serial Number and Customer Number' with an 'Add' button. Below the title, it displays 'Page : 1 | Total Record(s) : 1 | Show 100 Records'. The table has five columns: Action Type, Serial Number, Customer Number, Description, and Expiration Date (MM/DD/YYYY) with a globe icon.

- 3) Select "Add" to enter blank lines into the table

The screenshot shows a close-up of the 'Add' button in the table header, which is a grey button with a plus sign icon and the text 'Add'.

- 4) Enter the serial number to be included or excluded, the associated customer number and a description & select "Save"

Equipment by Serial Number and Customer Number Add

Action Type	Serial Number	Customer Number	Description
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	4TR12345	100029	Out of Territor

 2.7.12.2 How to Review Equipment by Serial Number and Customer Name History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Equipment by Serial Number and Customer Name

- 1) Click on the History button on the upper right hand side of the section

Equipment by Serial Number and Customer Number Add History

Page : 1 | Total Record(s) : 1 | Show 100 Records

Action Type	Serial Number	Customer Number	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	4TR12345	100029	Out of Territor	07/01/2016	Lori Button	07/01/2015 12:51:14 AM	✘

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Serial Number – Customer Number
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.13 Equipment by Territory Inclusion or Exclusion

Dealers may flag a territory status for equipment units in their ERP system. This configuration allows the Dealer to apply Inclusions or Exclusions based on those indicators. Statuses are:

- I = In Territory
- O = Out of Territory
- F = National fleet (equipment that moves between Dealer territories)
- X = Unknown

Example 1:

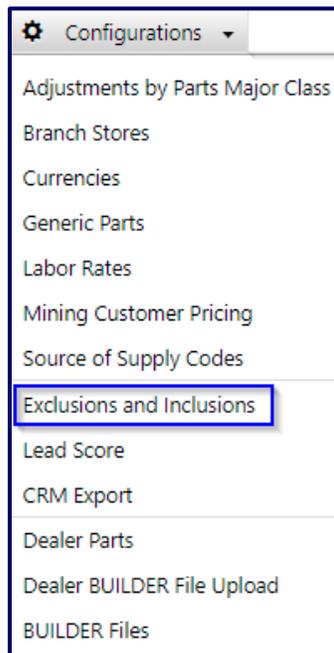
Out of territory equipment should be excluded from OLGA.

Configuration Input: The Dealer should enter an Equipment by Territory exclusion for unit with the “O” status.

2.7.13.1 How to use the Equipment by Territory Inclusion or Exclusion



- 1) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions



2) Navigate to the Equipment Territory tab

Equipment By Territory

Page : 1 | Total Record(s) : 3 | Show 100 Records

Action Type	Equipment Territory	Description	Expiration Date (MM/DD/YYYY)
-------------	---------------------	-------------	------------------------------

3) Select "Add" to enter blank lines into the table

Equipment By Territory

4) Enter the territory exclusion and a description & select "Save"

Equipment By Territory

Page : 1 | Total Record(s) : 3 | Show 100 Records

Action Type	Equipment Territory	Description	Expiration Date (MM/DD/YYYY)
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	D	Dawn Test	04/25/2018



2.7.13.2 How to Review Equipment by Territory History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Equipment by Territory

1) Click on the History button on the upper right hand side of the section

Equipment By Territory

Page : 1 | Total Record(s) : 3 | Show 100 Records

Action Type	Equipment Territory	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	D	Dawn Test	04/25/2018	Lori Button	04/25/2017 09:32:36 AM	✗
<input type="radio"/> Include <input checked="" type="radio"/> Exclude	F	Out of territory units	04/20/2018	Lori Button	04/25/2017 09:32:36 AM	✗

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Customer Territory (Location)
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.7.14 Equipment by Activity Inclusion or Exclusion

Dealers may flag an activity status for equipment units in their ERP system. This configuration allows the Dealer to apply Inclusions or Exclusions based on those indicators. Statuses are:

- S = Scrapped/Used for Parts
- O = Other

Example 1:

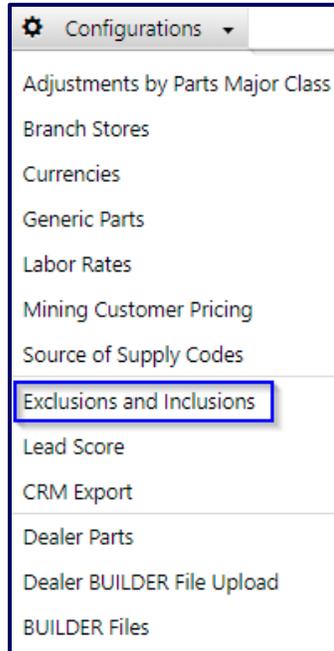
Equipment that has been scrapped or used for parts should be excluded from OLGA.

Configuration Input: The Dealer should enter an Equipment by Activity exclusion for unit with the "S" status.

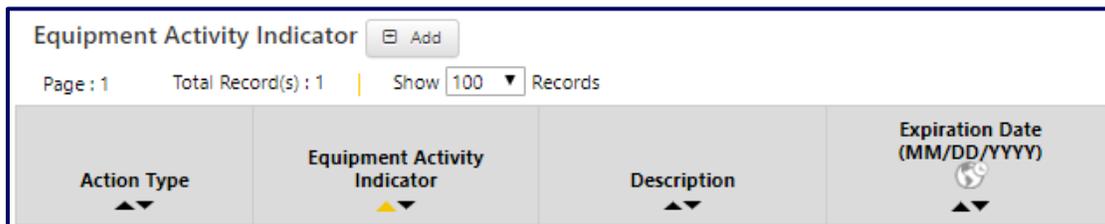
2.7.14.1 How to use the Equipment by Activity Inclusion or Exclusion

- 5) In the OLGA web application, navigate to the Configuration Menu → Exclusions and Inclusions





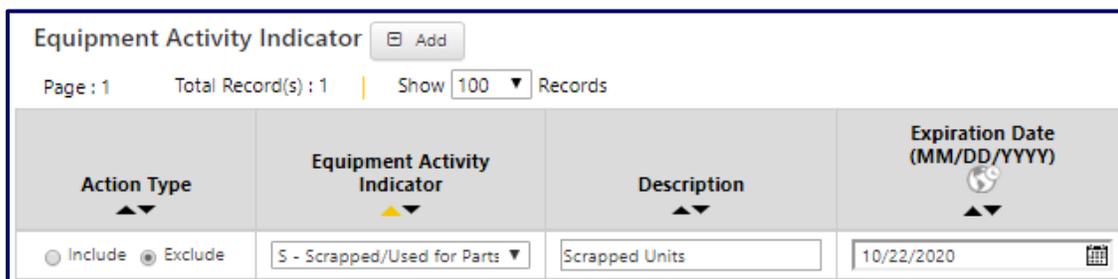
6) Navigate to the Equipment Activity tab



7) Select "Add" to enter blank lines into the table



8) Enter the activity exclusion and a description & select "Save"





2.7.14.2 How to Review Equipment by Activity History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Equipment by Activity

- 4) Click on the History button on the upper right hand side of the section

Action Type	Equipment Activity Indicator	Description	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Delete
Include <input checked="" type="radio"/> Exclude <input type="radio"/>	S - Scrapped/Used for Parts	Scrapped Units	10/22/2020	Windell Robert E	10/30/2019 01:48:10 PM	X

- 5) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Customer Territory (Location)
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 6) The changes are listed in descending chronological order (the most recent change will be at the top)

2.8 CRM Export

The OLGA Customer Relationship Management (CRM) export function creates a data file of opportunities for use in existing CRM processes or for integration with existing CRM systems. Depending upon the structure of the Dealer’s CRM processes, the OLGA Opportunities/Sales Search Report and/or Past and Future Opportunities (By Customer) Report exports may also be used in CRM processes. Each Dealer should determine which export file meets their needs if intending to integrate with the Dealer’s CRM processes or system.

The opportunity events generated by the OLGA application are generated on a monthly basis. Depending on a dealer’s configurations to extract these event opportunities, the data is sent as a compressed (zipped) XML file to your assigned Sterling Mailbox (SI) Caterpillar Digital Data Warehouse (CDDW) mailbox.

Along with this opportunity information, a customer history XML file will also be included in the single compressed (zipped) interface file. This customer history file contains rolling 12 month sales and opportunity amounts for each customer and customer division.

2.8.1 CRM Export Data Logic

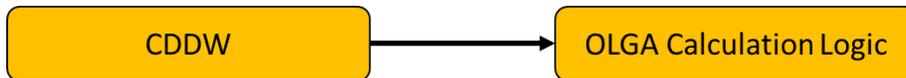
OLGA opportunities are created using Dealer data (customer population, equipment population, work orders, and invoices) and internal Caterpillar data sources. The Dealer data is sent to Caterpillar and retrieved from the Dealer’s outgoing Sterling Integrator (SI) Mailbox (also referred to as the Extract, Transform, & Load (ETL) process).

The SI Mailbox is an application Caterpillar uses for secure managed file transfers between the Dealer and Caterpillar. This enables Dealers to connect to the Caterpillar Network securely to send and receive data directly to/from a dedicated mailbox. The SI Mailbox requires login and password authentication.

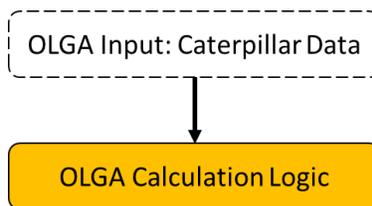
The SI mailbox is used by Dealers to transfer their customer, equipment, work order and invoice data to as part of the ETL process is also used to manage the file transfer of the CRM export file. The images in the next section show how Dealer data is transferred to the Sterling Integrator mailbox and fed into the Caterpillar Digital Data Warehouse (CDDW) which is then combined with Caterpillar data in the OLGA calculations.

2.8.1.1 CRM Data Logic Process Map

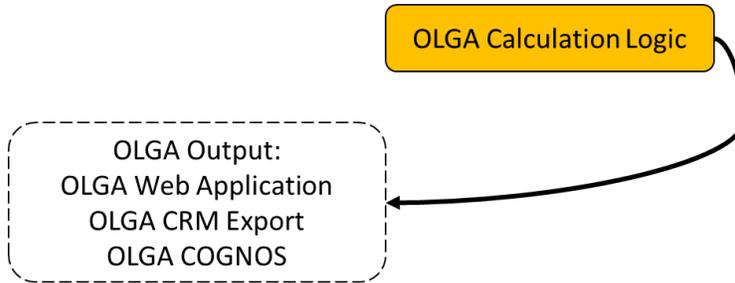
The Caterpillar Digital Data Warehouse (CDDW) retrieves Dealer data from the SI Mailbox and transfers the information to OLGA where the calculations of opportunities and aggregation of sales are done.



Caterpillar data sources are used in combination with Dealer data, which includes Caterpillar BUILDER files, calculated utilization rates for equipment serial numbers, Dealer area parts price files, Dealer part numbers and prices for generic parts (fluids).

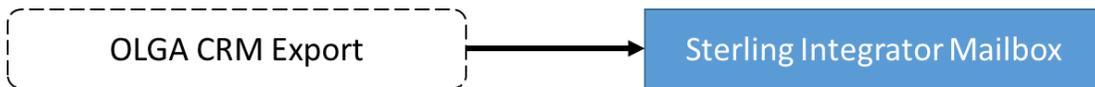


Once OLGA completes its calculations, OLGA provides the output data in several formats including the OLGA web application reports, OLGA web application CRM Export, and OLGA COGNOS cubes.

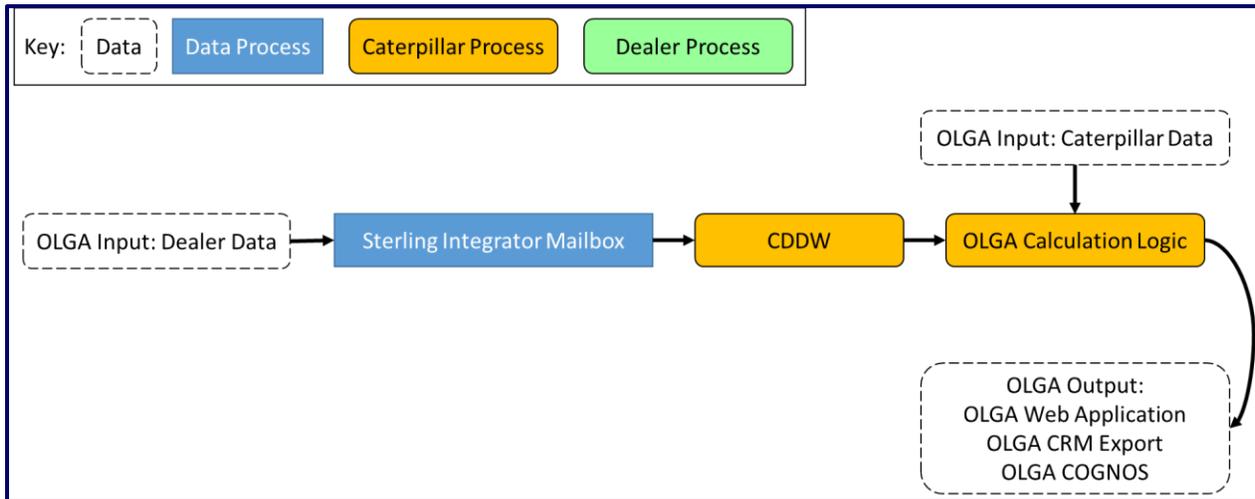


Within the OLGA output data, Dealers view their opportunities with reference to customer number, SMCS codes, target date & SMU, parts value, labor value, and PSSRs.

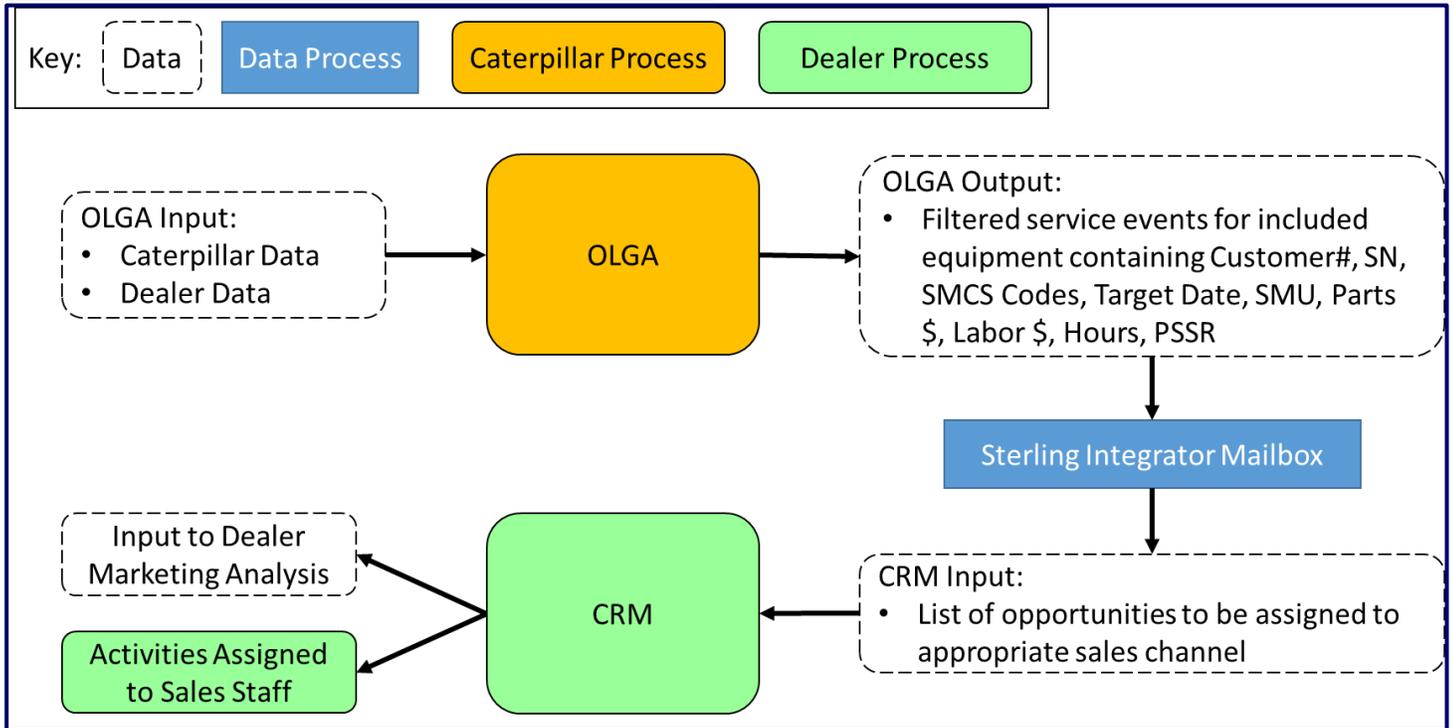
On the CRM Export page of OLGA, the selection criteria for the opportunities to be included in the CRM export file are configured by the Dealer. Resulting CRM export file is an XML file which is sent to the Sterling Integrator (SI) Mailbox.



2.8.1.1.1 Complete CRM Data Logic Process Map 1:



2.8.1.1.2 Complete CRM Data Logic Process Map 2:



2.8.1.2 DICE Documents

There are two DICE documents available for the CRM Export: Opportunity Events & Customer History Elements. Please refer to **Section 3.2.2** for more information on DICE documents.

2.8.2 CRM Export Set Up

The CRM Export file can be configured in a variety of ways. The next items are important to understand before setting up your CRM export file.

2.8.2.1 Creation of the Opportunity Number in the CRM Export File

The Opportunity Number is created on the CRM export file and can be used for mapping in the dealer’s CRM system as the key or unique value. Whether the Opportunity comes through with the same Number or not on subsequent exports is dependent on the selections made in the Reset CRM and Export All Opportunities sections of the CRM Export page in the OLGA web application.

2.8.2.2 Export CRM – Builder File Switch Impact on Opportunity Number

An Opportunity may be given a new Number in the CRM export file due to a change in Builder Files. In the CRM Export, dealers may see ‘delete’ and ‘new’ actions for what appears to be a similar opportunity. This is due to a switch from an old Caterpillar Builder File to a new Dealer Builder File.

2.8.2.3 *Once Included in the Export, Always Included*

If an opportunity was sent at all as part of the dealer’s CRM Export, then updates to that opportunity will continue to be sent. This is regardless of whether the updated opportunity is currently outside the CRM Export configuration parameters.

If the CRM Export parameters say to send all opportunities covering the next 12 months, but the utilization rate of a particular serial number drops such that it pushes out the opportunity beyond the 12 month window, it will continue to be included in the CRM export. For example, Dealers will see updates to past opportunities if indicative data (ex: customer name) on the past opportunity changes.

Another example is that dealers may see an expected date of 2099 on some opportunities. This occurs when there was a significant change in utilization for an existing opportunity such that it pushes the opportunity out indefinitely. The system will use 2099 as the maximum year.

2.8.2.4 *General Configurations: CRM Actions*

CRM Export offers two options for what can be exported. Each action can be changed and will update with a calculation run. Until an automatic monthly calculation run is put in place for all Dealers, the CRM configurations will be done manually, and the configuration preferences will not have an impact on the data exported to the Dealer’s CRM system. Note that by default, all Included opportunities will be included in the report.

When monthly calculation runs are in place, the following logic will perform in the CRM configuration.

- Reset CRM
- Export All Opportunities

Configuration	Description	Action / Value	Updated By	Updated Date (MM/DD/YYYY)
Reset CRM	Export all records as new opportunities. By default, the export sends updates to the opportunities that were exported in the last monthly calculation run.	Yes	Kristin Freidinger	11/09/2015 01:17:27 PM
Export All Opportunities	Export all included opportunities = Yes; Export only new and changed opportunities within the number of months defined below = No.	Yes	Kristin Freidinger	11/09/2015 01:17:27 PM

2.8.2.4.1 Reset CRM:

Upon an initial calculation run, the Dealer will establish a baseline export file for their CRM data. Their first export will include all the specified limits from the set of opportunities that can be included in an export.

With monthly calculations runs, the ‘Reset CRM’ will allow users to either send all opportunities as new or choose to only send changed files.

Reset CRM = Yes

All Opportunities values will be sent and all values in Opportunity Status will be set to ‘NEW’. This is regardless of whether the opportunity had been sent as part of a previous export.

Reset CRM = No

Opportunities will be sent with statuses of either A) new, deleted, existing, and updated, or B) new, deleted, and updated as values. Which values are sent through on the export depends on the Export All Opportunities selection. This value can only be utilized for monthly runs. The parameter will be ignored for initial runs.

Configuration	Description	Action / Value	Updated By	Updated Date (MM/DD/YYYY)
Reset CRM	Export all records as new opportunities. By default, the export sends updates to the opportunities that were exported in the last monthly calculation run.	No	Dawn Getz	03/23/2015 02:48:02 PM

2.8.2.4.2 Practical Applications of Reset CRM

There may be occasions where for a particular monthly run the Reset CRM will need to be set to “Yes” even if you would not normally do this. Users will likely want to do this if changes to Division or Component Groups are changed on the CRM Export Configuration Screen. Take note of the system settings. When the *Reset CRM* is set to “No”, the default CRM process is designed to always send updates for opportunities which have already been sent to the dealer. This means that even if the CRM Export Configuration Screen is changed to exclude a particular opportunity by Division or Component Group, updates will continue to be sent for those opportunities. Once an opportunity has been included in the CRM export, it will not be removed as long as the *Reset CRM* option is set to “No”.

If Divisions or Component Groups are adjusted and the dealer does not wish to receive updates for the previously included opportunities (which are now excluded opportunities), then be sure to set the *Reset CRM* indicator to “Yes” for the next monthly run. Then, the *Reset CRM* can be changed back to “No” and only updates will be sent again going forward.

Note: When **Reset CRM = No**, then the opportunities are being sent through the export file with a specific status. Be especially aware of the UPDATED status.

An UPDATED status will occur at any time a value on an opportunity is changed. This means that the entire record will be resent when there is an update. Even one change in a field is enough to trigger an update that comes through in the export.

2.8.2.4.3 Export All Opportunities:

Upon an initial calculation run, the Dealer will establish a baseline export file for their CRM data. Their first export will include all the specified data from the set of opportunities that can be included in an export.

With monthly calculation runs, the ‘Export All Opportunities’ will allow the user to send all opportunities as new or only send changed files.

Export All Opportunities = Yes

All Opportunities will be resent and all values in Opportunity Status will be set to 'Existing'.

Export All Opportunities = No

Only new, deleted, and changed values will be sent.

2.8.2.4.4 Working Together: Reset CRM & Export All Opportunities

The Reset CRM & Export All Opportunities work together. Together, they create 3 options for the user to receive their CRM export file opportunity records. Think of the Export All Opportunities selection as a subset of the Reset CRM selection. Export All Opportunities only works if the selection for Reset CRM is "No".

Option 1 → Selecting "No" for Reset CRM & "Yes" for Export All Opportunities.

This will send those values that have been indicated as new, deleted, updated, or existing records.

Configuration	Action / Value	
Reset CRM	No	Month 1: 123 John DAN0001 1000 \$5000 1-July-2016 NEW 124 Mary BAH0001 1000 \$500 1-July-2016 NEW
Export All Opportunities	Yes	Month 2: 123 John DAN0001 1000 \$5000 1-July-2016 EXISTING 124 Mary BAH0001 1000 \$500 1-Aug-2016 UPDATE 125 James 9TZ0001 1000 \$4500 1-Sept-2016 NEW

Opportunity Number

Initial Runs & Monthly Runs will behave the same: Within OLGA, existing opportunities will retain a previously generated opportunity number. Only new opportunities being sent to the dealer will come through with a new Opportunity Number. All deleted, existing, and updated opportunities will come through with the same Opportunity Number used in previous CRM exports.

Opportunity Status:

Validate values sent for this option: N, D, E, U (New, Delete, Existing, Update)

Option 2: → Selecting "No" for Reset CRM & "No" for Export All Opportunities

This will send those values that have been indicated as new, deleted, or updated information while excluding existing records.

Configuration	Action / Value	
Reset CRM	No	Month 1: 123 John DAN0001 1000 \$5000 1-July-2016 NEW 124 Mary BAH0001 1000 \$500 1-July-2016 NEW
Export All Opportunities	No	Month 2: 124 Mary BAH0001 1000 \$500 1-Aug-2016 UPDATE 125 James 9TZ0001 1000 \$4500 1-Sept-2016 NEW

Opportunity Number

Initial Runs & Monthly Runs will behave the same: Within OLGA, existing opportunities will retain a previously generated opportunity number. Only new opportunities being sent to the dealer will come through with a new Opportunity Number. All Deleted and updated opportunities will come through with the same Opportunity Number used in previous CRM exports.

Opportunity Status:

Validate values sent for this option: N, D, U (New, Delete, Update)

Option 3: → Selecting "Yes" for Reset CRM

Export All Opportunities is overridden in this case -- it does not matter which one you pick, but it does default to "No". This will send a whole new report (essentially a re-write of the whole report) that includes all values.

Configuration	Action / Value	
Reset CRM	Yes	Month 1: 123 John DAN0001 1000 \$5000 1-July-2016 NEW 124 Mary BAH0001 1000 \$500 1-July-2016 NEW
Export All Opportunities	No	Month 2: 123 John DAN0001 1000 \$5000 1-July-2016 NEW 124 Mary BAH0001 1000 \$500 1-Aug-2016 NEW 125 James 9TZ0001 1000 \$4500 1-Sept-2016 NEW

Opportunity Number

Initial Runs & Monthly Runs will behave the same: Within OLGA, existing opportunities will retain a previously generated opportunity number.

Opportunity Status:

Validate values sent for this option: N (New) All records will be sent as New.

2.8.3 CRM Export Process

The CRM Export file allows the Dealer to create an export file from the opportunities generated by OLGA.

2.8.3.1 Limit the Set of Opportunities to be Included in the Report

The following parameters allow the Dealer to further define which opportunity events should be included in the CRM Export file. By default, all opportunities that meet the selected criteria above are included in the extract, which may result in a large number of opportunities. To further limit the number of opportunity events to export, use the following parameters:

Past Opportunities:

Includes opportunity events within a specified number of months in the past. The number “0” results in no past opportunities being included. Valid values are 0 – 36.

Configuration	Description	Action / Value	Updated By	Updated Date (MM/DD/YYYY)
Past Opportunities	Export included opportunities within a specified number of months in the past. The number 0 results in no past opportunities included in the export. Valid values: 0-36	0 <input type="text"/>	Dawn Getz	03/23/2015 02:48:02 PM

Future Opportunities:

Includes opportunity events within a specified number of months in the future. The number “0” results in no future opportunities to be included. Valid values are 0 – 36.

Future Opportunities	Export included opportunities within a specified number of months in the future. The number 0 results in no future opportunities included in the export. Valid values: 0-36	0 <input type="text"/>	Dawn Getz	03/23/2015 02:48:02 PM
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Minimum Opportunity Value:

Includes opportunity events with a minimum opportunity value (parts and labor) defined in the configured default currency.

Minimum Opportunity Value		0 <input type="text"/>	Dawn Getz	03/23/2015 02:48:02 PM
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2.8.3.2 Division Selection Functionality

Dealers can limit the opportunity events to be included in the CRM export file by Division.

Division ▲▼	Include <input type="checkbox"/> ▲▼	Updated By ▲▼	Updated Date (MM/DD/YYYY) ▲▼
A	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:43:52 PM
B	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:44:08 PM
C	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:44:08 PM
D	<input type="checkbox"/>	Lagacy Christopher	01/31/2019 10:29:51 AM
E	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:43:52 PM
G	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
H	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM
K	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM
L	<input type="checkbox"/>	Lagacy Christopher	01/31/2019 10:29:51 AM
N	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM
R	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM
T	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
U	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM
Unknown	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM
V	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM
W	<input type="checkbox"/>	Lagacy Christopher	03/30/2017 03:24:49 PM

The option to quickly 'Select All' is available by clicking the box beneath the column header 'Include':

Division ▲▼	Include <input checked="" type="checkbox"/> ▲▼	Updated By ▲▼	Updated Date (MM/DD/YYYY) ▲▼
A	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:43:52 PM
B	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:44:08 PM
C	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:44:08 PM

2.8.3.3 Sub Component Selection Functionality

Finally, Dealers can limit the opportunity events to be included in the CRM export file by Component Sub Group. This would be useful in instances when Dealers are running campaigns. Component Sub Groups in this selection list are defined by the SMCS code standards in the SMCS Code Booklet:

<https://smi.cat.com/smiweb/SMCSSEARCH.do?method=displayCriteria&type=SMCSSEARCH%23>

Component Sub Group	Component Sub Group Description	Include	Updated By	Updated Date (MM/DD/YYYY)
0100	FUNDAMENTAL KNOWLEDGE & THEORY	<input type="checkbox"/>	Brianne DeVenney	09/07/2016 01:46:36 PM
0300	MANAGEMENT CONCEPTS AND APPLICATION	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0350	SERVICE OPERATIONS (ACTIVITIES)	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0600	HAND TOOL GROUPS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0614	POWER TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0629	LIFTING AND BLOCKING TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0644	MAINTENANCE TOOLS AND SUPPLIES	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0659	TRANSPORTING AND STORAGE TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0669	METAL WORKING AND FABRICATING TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0699	GENERAL PURPOSE TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0759	MEASURING AND ADJUSTING TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0769	DIAGNOSTIC TESTING EQUIPMENT	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0799	REPAIR CENTERS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0800	RECYCLING AND WASTE MANAGEMENT	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
1000	ENGINE	<input checked="" type="checkbox"/>	Daniel Gabrielse	03/11/2016 03:32:30 PM
1050	AIR INDUCTION & EXHAUST SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1100	CYLINDER HEAD ASSEMBLY	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1150	FRONT & REAR COVERS	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1200	SHORT BLOCK	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1250	FUEL SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1300	LUBRICATION SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1350	ENGINE COOLING SYSTEM	<input checked="" type="checkbox"/>	Daniel Gabrielse	03/11/2016 03:32:30 PM
1400	ELECTRIC SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1450	STARTING SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM

(*Note: above image is just a snap shot of available sub component selections. See application for full listing)

The option to quickly ‘Select All’ is available by clicking the box beneath the column header ‘Include’:

Component Sub Group	Component Sub Group Description	Include	Updated By	Updated Date (MM/DD/YYYY)
0100	FUNDAMENTAL KNOWLEDGE & THEORY	<input checked="" type="checkbox"/>	Brianne DeVenney	09/07/2016 01:46:36 PM
0300	MANAGEMENT CONCEPTS AND APPLICATION	<input checked="" type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0350	SERVICE OPERATIONS (ACTIVITIES)	<input checked="" type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM

Once all selection criteria are configured and saved, the exported XML file can be used to integrate into existing CRM processes or into existing CRM systems. Each opportunity event includes a unique opportunity number to allow the Dealer to track changes to that opportunity between OLGA and the CRM process/system.

2.8.3.4 How to Generate OLGA CRM Export Files

1) In the OLGA web application, navigate to Configuration Menu → CRM Export



- 2) Under the Action/Value section, select Yes to enable the CRM export.
- a. This will produce an export file every time an OLGA calculation is run (at the minimum, monthly).
 - b. By default, an export will not generate on a monthly basis, it must be enabled with the action/value of Yes.

CRM Export

By default, CRM is disabled for your dealership

Configuration	Action / Value	Updated By	Updated Date (MM/DD/YYYY) 
Enable CRM Export	<div style="border: 1px solid gray; padding: 2px;"> Yes ▼ Yes No </div>	Lori Button	06/03/2016 05:02:20 PM

- 3) Determine whether to reset the CRM export each month.
- a. If “No”, then decide how you want the opportunities sent – whether to export all opportunities each month or just the new and changed opportunities.
 - b. If “Yes” then it does not matter what you select for *Export All Opportunities* as the result will be the same regardless.
 - c. Further explanation on these options can be found in the next **Section 2.8.2.2**.

General Configurations: CRM Actions

By default, all included opportunities will be included in the export.

Configuration	Description	Action / Value
Reset CRM	Export all records as new opportunities. By default, the export sends updates to the opportunities that were exported in the last monthly calculation run.	No ▾
Export All Opportunities	Export all included opportunities = Yes; Export only new and changed opportunities within the number of months defined below = No.	No ▾

- 4) Nominate the time period of opportunities to be exported in the CRM Export file and whether a minimum value threshold should apply.

Limit the set of opportunities to be included in your export.

The following parameters determine which opportunities will be included. By default, all opportunities are included in the extract. This may be a large number of opportunities.

Configuration	Description	Action / Value
Past Opportunities	Export included opportunities within a specified number of months in the past. The number 0 results in no past opportunities included in the export. Valid values: 0-36	6 <input type="text"/>
Future Opportunities	Export included opportunities within a specified number of months in the future. The number 0 results in no future opportunities included in the export. Valid values: 0-36	6 <input type="text"/>
Minimum Opportunity Value	Export included opportunities greater than a specified value. Value is in default currency.	0 <input type="text"/>

- 5) Select which divisions to include in the CRM export file.

Division	Include
C - CONSTRUCTION	<input checked="" type="checkbox"/>
D - LOGISTICS	<input checked="" type="checkbox"/>
G - DIVISION G	<input checked="" type="checkbox"/>
K - LIGHT CONSTRUCTION	<input checked="" type="checkbox"/>
N - INDUSTRIAL ENGINE	<input checked="" type="checkbox"/>
T - ENGINE - TRUCK	<input checked="" type="checkbox"/>
Unknown	<input checked="" type="checkbox"/>
V - VOCATIONAL TRUCK	<input checked="" type="checkbox"/>

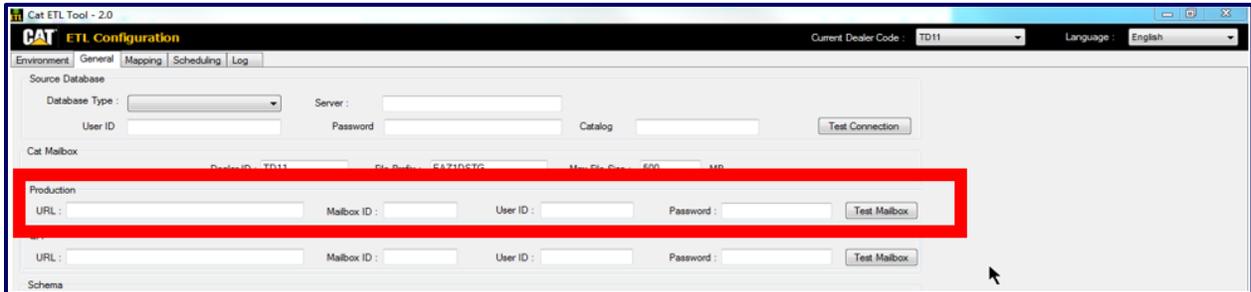
- 6) Select which types of opportunities by sub component group to include in the CRM export file. Once selections have been made, click Save.

Component Sub Group ▲▼	Component Sub Group Description ▲▼	Include <input type="checkbox"/> ▲▼	Updated By ▲▼	Updated Date (MM/DD/YYYY) ▲▼
0100	FUNDAMENTAL KNOWLEDGE & THEORY	<input type="checkbox"/>	Brianne DeVenney	09/07/2016 01:46:36 PM
0300	MANAGEMENT CONCEPTS AND APPLICATION	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0350	SERVICE OPERATIONS (ACTIVITIES)	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0600	HAND TOOL GROUPS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0614	POWER TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0629	LIFTING AND BLOCKING TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0644	MAINTENANCE TOOLS AND SUPPLIES	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0659	TRANSPORTING AND STORAGE TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0669	METAL WORKING AND FABRICATING TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0699	GENERAL PURPOSE TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0759	MEASURING AND ADJUSTING TOOLS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0769	DIAGNOSTIC TESTING EQUIPMENT	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0799	REPAIR CENTERS	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
0800	RECYCLING AND WASTE MANAGEMENT	<input type="checkbox"/>	Lagacy Christopher	03/08/2018 08:11:45 AM
1000	ENGINE	<input checked="" type="checkbox"/>	Daniel Gabrielse	03/11/2016 03:32:30 PM
1050	AIR INDUCTION & EXHAUST SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1100	CYLINDER HEAD ASSEMBLY	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1150	FRONT & REAR COVERS	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1200	SHORT BLOCK	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1250	FUEL SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1300	LUBRICATION SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1350	ENGINE COOLING SYSTEM	<input checked="" type="checkbox"/>	Daniel Gabrielse	03/11/2016 03:32:30 PM
1400	ELECTRIC SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM
1450	STARTING SYSTEM	<input checked="" type="checkbox"/>	Lagacy Christopher	11/06/2017 02:29:32 PM

- 7) Each month when the OLGA data is processed, the CRM export file will be produced and the Dealer can pick up the file from their Sterling Integrator mailbox.

2.8.3.5 How to Retrieve OLGA CRM Export File from the SI Mailbox

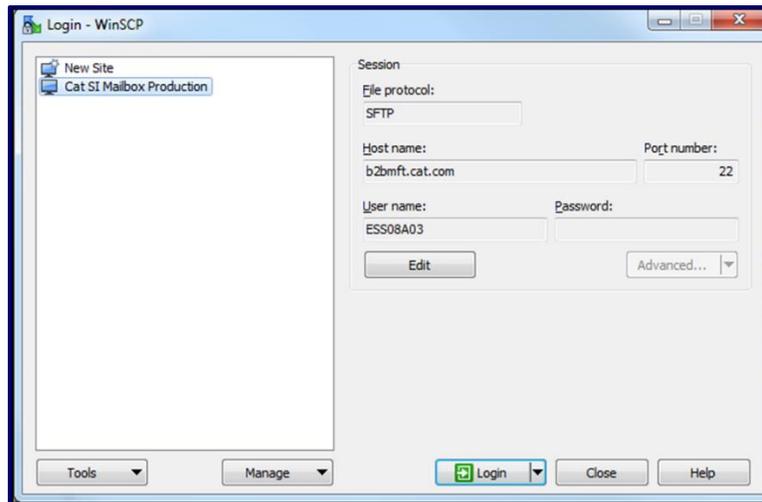
- 
- 1) The Dealer I/T Department needs to use an SFTP (Secure File Transfer Protocol) client such as WinSCP, FTP Pro, or Filezilla in order to access the SI Mailbox.
 - 2) Using the SFTP client, connect to the SI Mailbox using the DNS address (URL/host), user name and password for your production mailbox. These can be found in the *Cat ETL Tool* → *General tab*.



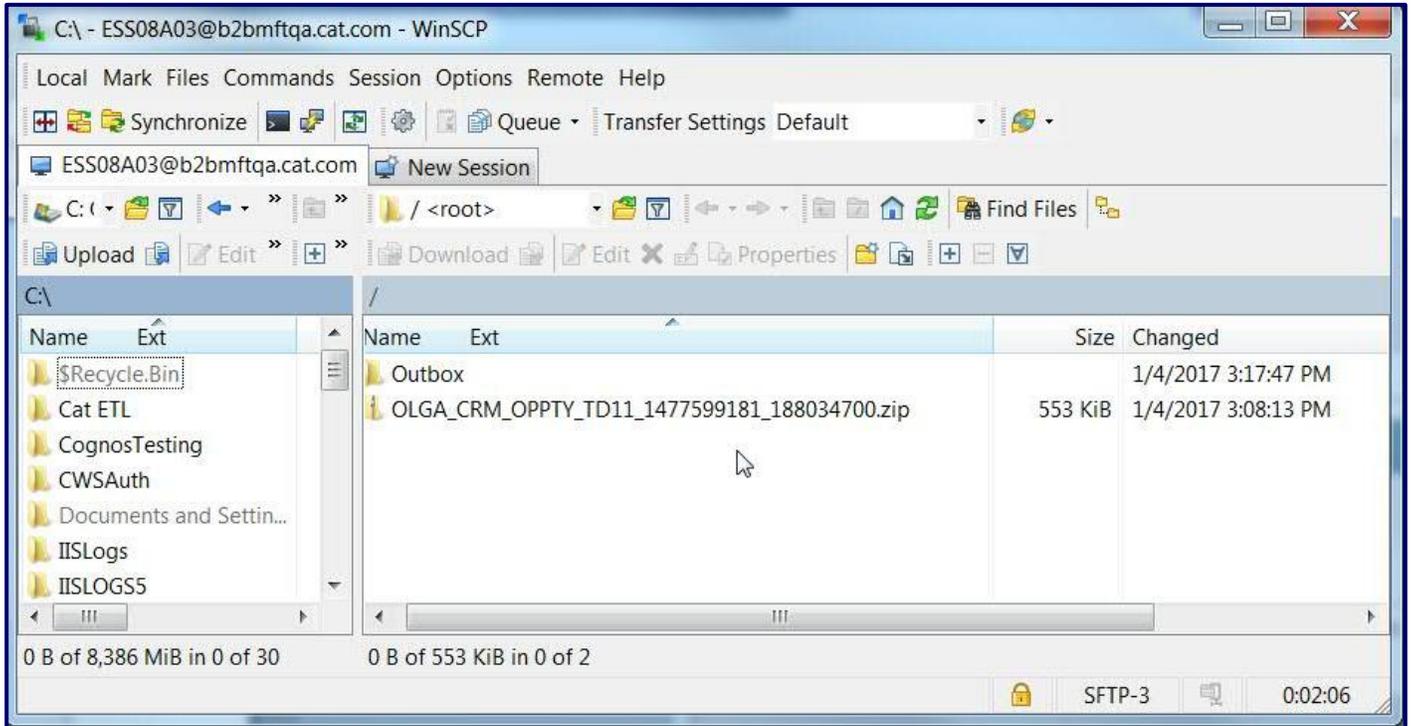
- 3) Locate the /Outbox of the SFTP client and find the ZIP file that contains the two XML files (Opportunity and Customer Sales).
 - a. The ZIP file follows this naming standard:
 OLGA_CRM_OPPTY_DealerCode_GeneratedTimeStamp.zip
 - i. Example: OLGA_CRM_OPPTY_TD11_67760477.zip
 - b. The ZIP file contains these two file names: Opportunity.xml & CustomerHistory.xml
- 4) Download the ZIP file and use in your CRM process.

2.8.3.5.1 Example from WinSCP, an SFTP Client:

- 1) Once you set up a session, you can save it similarly to the saved session shown below named “Cat SI Mailbox Production”



- 2) After successfully logging in, the root directory will be presented on the right side panel.
 - a. Once the OLGA Calculation Run has completed and if you have the OLGA CRM function turned on to generate an extract file, the file will be sent to the root directory.



2.8.4 CRM Export Example

Given this Month 1 total list of Opportunities:

Customer Number	Customer Name	Serial Number	Division	Component Group	Dollar	Date
122	Sue	EY10001	E	1000	\$3,500	1-July-2016
123	John	DAN0001	R	1000	\$5,000	1-July-2016
124	Mary	BAH0001	R	1000	\$400	1-July-2016
125	John	9TZ0001	M	1000	\$3,000	1-July-2016

And given that the CRM Export Configuration Screen indicates that only the “R” (rental) and “E” (engine) division opportunities are selected on the screen.

Therefore only these two division opportunities should be included and sent via the interface for the CRM Export. All other division codes are not selected on the screen.

In this scenario, the Month 1 CRM File will include:

Customer Number	Customer Name	Serial Number	Division	Component Group	Dollar	Date
122	Sue	EY10001	E	1000	\$3,500	1-July-2016
123	John	DAN0001	R	1000	\$5,000	1-July-2016
124	Mary	BAH0001	R	1000	\$400	1-July-2016

Let's build on this.

Given this Month 2 total list of Opportunities:

Customer Number	Customer Name	Serial Number	Division	Component Group	Dollar	Date
122	Sue	EY10001	E	1000	\$3,500	1-July-2016
123	John	DAN0001	R	1000	\$5,000	1-July-2016
124	Mary	BAH0001	R	1000	\$400	12-Aug-2016
125	John	9TZ0001	M	1000	\$3,000	1-July-2016
126	Sue	BAH0002	R	1000	\$5,500	15-Aug-2016
127	Mike	9TZ0004	M	1000	\$4,500	15-Aug-2016

Prior to creating the CRM Export for Month 2, the CRM Export Configuration Screen was changed from including only the "R" (rental) and "E" (engine) divisions. It now includes only the "E" (engines) and "M" (machine) divisions. The "R" (rental) division is no longer selected on the screen.

What is included in the CRM Export is dependent on the Reset CRM indicator.

If the *Reset CRM* indicator was left on "No" when the Month 2 CRM Export was performed, then the process will continue to send any "R" (rental) division opportunities which have already been sent (note that exactly how these opportunities come in is further dependent on the Export All Opportunities selection – Review [Section 2.8.2](#)).

This would be the Month 2 CRM File output:

Customer Number	Customer Name	Serial Number	Division	Component Group	Dollar	Date	Action
124	Mary	BAH0001	R	1000	\$400	12-Aug-2016	Update
125	John	9TZ0001	M	1000	\$3,000	1-July-2016	New
127	Mike	9TZ0004	M	1000	\$4,500	15-Aug-2016	New

Explanation for the Month 2 CRM Export table:

- Opportunity 122 was not sent because nothing changed.
- Opportunity 123 was not sent because nothing changed.
- Opportunity 124 was sent with an “Update” action because the Date changed.
- Opportunity 125 is now included because it is part of the “M” (machine) division. Even though Opportunity 125 was originally created in Month 1, it is still sent with a “New” action because this is the first time it is being sent in the CRM file.
- Opportunity 126 is a “R” (rental) division opportunity which was newly generated in Month 2. However, no new “R” (rental) division opportunities will be sent because the CRM Export Configuration Screen was changed to exclude these records.
- Opportunity 127 is a “M” (machine) division opportunity which was newly generated in Month 2. Because “M” (machine) division opportunities are now included, this record was sent as part of the CRM file with a “New” action.

If the **Reset CRM indicator was changed to “Yes”** when the Month 2 CRM Export was performed, then this would be the Month 2 CRM File output:

Customer Number	Customer Name	Serial Number	Division	Component Group	Dollar	Date	Action
122	Sue	EY10001	E	1000	\$3,500	1-July-2016	New
125	John	9TZ0001	M	1000	\$3,000	1-July-2016	New
127	Mike	9TZ0004	M	1000	\$4,500	15-Aug-2016	New

Notice that no “R” (rental) division opportunities were included in this CRM file output. Also notice that Opportunity 122 was sent with an action of “New” even though it had been previously sent in Month 1. This

is because all included opportunities will be sent with an action of “New” when the *Reset CRM* indicator is set to “Yes.”

2.9 Dealer Parts File Upload

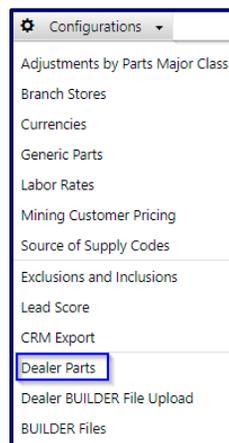
Dealers using Dealer BUILDER files, which include Dealer specific part numbers, will need to configure those parts in OLGA for the opportunity calculation. Examples of Dealer defined parts includes:

- Used parts
- Dealer exchange parts
- Dealer created kits including Cat parts

Note: If the Dealer's parts are not updated 30 days prior to the expiration date, then the line item will high-light yellow. Once it has passed the expiration date, the line will appear red. If the Dealer needs to make any changes to the dealer parts, they will first have to update the expiration date before making any changes.

2.9.1 How to Import a Dealer Parts File

- 1) In the OLGA web application, navigate to the Configuration Menu → Dealer Parts



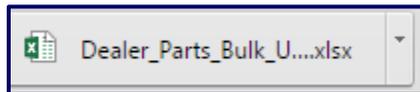
- 2) For an easy upload and to prevent any errors, use the file template download provided.
 - a. Click “To download file template, click here”

Dealer Parts

⊕ Add
⊕ Import Dealer Parts File

To download file template click [here](#)

b. Open the Excel file



3) Fill out each column in the template and save the file

	A	B	C	D	E	F	G	H
1	Part Number	Description	Source of Supply Code	Major Minor Class Code	PPC Code	Part Price	Expiration Date (MM/DD/YYYY)	Comments
2	TEST000001	Test Part 1	120	1A	TSG	12.28	12/31/2015	Sample Valid Data
3								

4) Select "Import Dealer Parts File" and open the saved file

Dealer Parts

⊕ Add
⊕ Import Dealer Parts File

To download file template click [here](#)

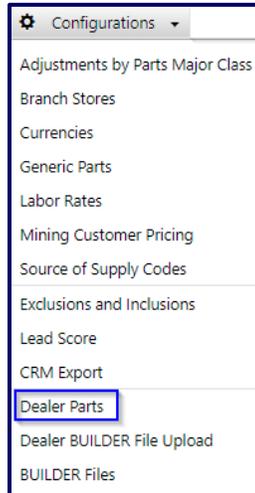
5) Once successfully imported, part number(s) will appear below the row heading with part numbers listed in the respective columns

Part Number	Description	Source of Supply	Major - Minor Class	PPC	Part Price	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)

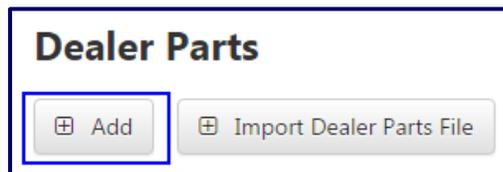
2.9.2 How to Upload an Individual Dealer Part Number

1) In the OLGA web application, navigate to the Configuration Menu → Dealer Parts





2) Select Add



3) Enter the details of the Dealer part & click Save

A screenshot of a web form titled 'Add Dealer Part'. The form contains several input fields and dropdown menus, each with an asterisk indicating it is required. The fields are: 'Part Number', 'Description', 'Source of Supply' (dropdown menu with 'Select' and a downward arrow), 'Major - Minor Class' (dropdown menu with 'Select' and a downward arrow), 'PPC' (dropdown menu with 'Select' and a downward arrow), 'Part Price (USD - US DOLLAR)', and 'Expiration Date' (text input with '08/23/2016' and a calendar icon).

If the Dealer Parts File Fails

- 1) Navigate to the Reports → Export Status page
 - a. This page will show an error file.
- 2) Select the "Download" to view the Dealer Parts Upload Errors file
- 3) Make needed corrections to the Dealer Parts file template
- 4) Save the updated template
- 5) Navigate back to the Configurations → Dealer Parts page
- 6) Click "Import Dealer Parts File" to re-upload the corrected template file

#	File Name	Request Date (MM/DD/YYYY)	Export Status	Download
1	Opportunities/Sales Search	05/02/2015 05:10:10 AM	Ready to Download	Download
2	BUILDER Files	05/02/2015 05:05:10 AM	Ready to Download	Download
3	BUILDER_OLGA_5110B_CZX1000-CZX2000	05/02/2015 04:01:01 AM	Ready to Download	Download
4	Dealer Parts Upload Errors	05/02/2015 02:50:10 AM	Ready to Download	Download
5	Post And Future Opportunities (By Customer)	05/01/2015 12:10:10 PM	Error: Please try Again.	

Error File Example:

	A	B	C	D	E	F	G	H
1	Part Number	Description	Source of Supply Code	Major Minor Class Code	PPC Code	Part Price	Expiration Date (MM/DD/YYYY)	Comments
2	TEST000001	Test Part 1	120	1A	TSG	12.28	12/31/2015	Invalid Source Of Supply Code
3								
4								



2.9.3 How to Review Branch Stores History

The History section is used to help track changes to Configurations. History shows who made the changes, what those changes were, and when they were made.

Dealer Parts

- 1) Click on the History button on the upper right hand side of the section

Dealer Parts 🌐 - In Central Standard Time										
<input type="button" value="Add"/> <input type="button" value="Import Dealer Parts File"/>		To download file template click here								<input type="button" value="History"/>
Page : 1	Total Record(s) : 6		Show <input type="text" value="100"/> Records							
Part Number	Description	Source of Supply	Major - Minor Class	PPC	Part Price	Expiration Date (MM/DD/YYYY)	Updated By	Updated Date (MM/DD/YYYY)	Edit	Delete
LORI 2	TEST 2	000	1A - SEALED AND LUBRICATED TRACK GROUPS	DNT - TTT D9 SALT TRACK GROUPS	123.00	09/18/2017	Lori Button	03/18/2017 01:06:07 PM		
Lori Test	Test Part	000	11 - NON-CAT BRANDED UNDERCARRIAGE	NIX - NEXUS UC IDLER GROUPS AND ASSEMBLIES	100.50	12/31/2017	Brianne DeVenney	06/02/2017 12:33:57 PM		
TEST1	Test Part 1	LORI	11 - NON-CAT BRANDED UNDERCARRIAGE	NIX - NEXUS UC IDLER GROUPS AND ASSEMBLIES	23.00	12/15/2018	Lagacy Christopher	05/11/2017 04:11:42 PM		
TEST1	Test Part 1	000	12 - EXPANDED MINING UNDERCARRIAGE	925 - DRILLS TRACK GROUPS	15.00	12/15/2018	Lagacy Christopher	05/11/2017 04:11:42 PM		
TEST2	Test Part 2	000	12 - EXPANDED MINING UNDERCARRIAGE	925 - DRILLS TRACK GROUPS	11.25	12/15/2018	Lagacy Christopher	05/11/2017 04:11:42 PM		

- 2) A pop-up window will appear and show the below columns:
 - a. Action
 - b. Dealer Part – Source of Supply Code
 - c. Column Name
 - d. Old Value
 - e. New Value
 - f. Updated By
 - g. Updated Date
- 3) The changes are listed in descending chronological order (the most recent change will be at the top)

2.10 Dealer BUILDER File Upload

OLGA uses BUILDER files prepared by the Caterpillar Repair Standards Group to calculate opportunity. However, Dealers can choose to upload their own BUILDER files to OLGA and this will act as an override. Dealers can upload and use customized G3 BUILDER files for a specific opportunity calculation. A Dealer BUILDER file will always be used in the calculation when it is available.

This is particularly relevant when Caterpillar does not have a BUILDER file for a serial number prefix, or the repair schedule observed in the Dealer's territory differs to the repair schedule documented in the Cat standard BUILDER file.

Keep in mind that dealer repair history should support customer, model, or application specific differences from the Caterpillar OLGA BUILDER files. Dealer BUILDER files must have a complete list of all major component repairs and Preventative Maintenance.



Best Practice: *If the Dealer does not have a library of previously developed Dealer BUILDER files, then the easiest way to create a customized BUILDER file for use in OLGA is to:*

- 1) *Download the Cat BUILDER file for the nominated serial number prefix (or a similar prefix)*
- 2) *Amend it in BUILDER G3*
- 3) *Save the file*
- 4) *Upload it back to OLGA*

The amended BUILDER file will then be used in the place of the Cat standard BUILDER file (or when there is no Cat BUILDER file, as the sole BUILDER file).

2.10.1 Dealer BUILDER File Validations

2.10.1.1 System Validations

Dealer BUILDER files go through a validation check upon upload:

- **Mandatory Fields** -- Compares and validates that all mandatory fields have been filled in.
- **Arrangement Number** --Validates that an engine arrangement number is listed in the Dealer's engine BUILDER file.
- **SCMS Codes** – Compares and validates that the SCMS codes used in the Dealer BUILDER file follow the standards in the SCMS Code booklet (<https://smi.cat.com>) for Caterpillar and Dealer Defined Codes.
- **Component Codes** – Compares and validates that the Dealer BUILDER file contains all of the components that are in the Cat OLGA BUILDER file. Dealer BUILDER files must contain at least one repair option for each major component for the entire lifecycle of the serial number prefix defined in the file.

2.10.1.2 Manual Validations

The Central OLGA team also performs audits on all uploaded dealer BUILDER files. The audit includes a review of the process used to create the dealer BUILDER file, as well as the actual changes made to the BUILDER file.

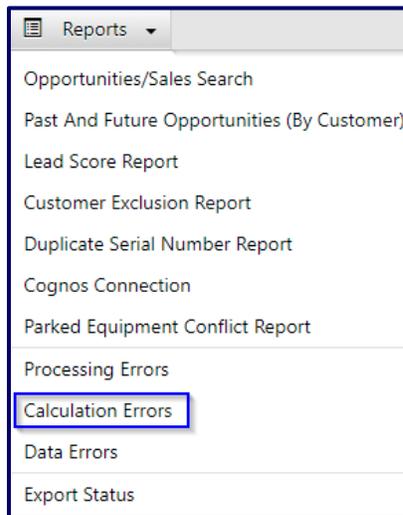
2.10.2 Identifying which Dealer BUILDER Files are Needed

Dealers should complete a vigorous process of determining whether it is necessary to upload Dealer BUILDER files to OLGA. To get the most out of this process, dealers should focus on:

- Serial number prefixes that Caterpillar does not have Cat standard BUILDER files for.
- High volume and high opportunity serial number prefixes when the local repair reality differs from the schedule in the Cat standard BUILDER files

2.10.2.1 How to identify serial number prefixes Cat does not have a BUILDER file for

- 1) In the OLGA web application, navigate to the Reports Menu → Calculation Errors



- 2) Generate Report without any customer or serial number filter selections applied

Calculation Errors

▼ Filters

Customer: -- Select --

Serial Number: -- Select --

Generate Report **Export to Excel**

- 3) Export the report to Excel
 - a. You can choose to name the file yourself or use the default naming.

Calculation Errors

▼ Filters

Customer: -- Select --

Serial Number: -- Select --

Generate Report **Export to Excel**

- 4) Download the report from the Reports Menu → Export Status and open the file in Excel

Export Status 🌐 - In Central Standard Time

#	File Name	Request Date (MM/DD/YYYY)	File Export Status	Download
1	Calculation Errors	10/08/2015 07:59:17 PM	Ready for Download	Download

- 5) Create a new column for the Serial Number Prefix and use the formula =left(SerialNo,3)
 - a. Fill that formula down for every row.

B2			
			=left(A2,3)
	A	B	C
1	SerialNo	Serial Number Prefix	Error Message
2	72J00786	=left(A2,3)	Missing Utilization Error
3	73U00883		Missing Utilization Error
4	87A07683		Missing Utilization Error
5	92E00987		Missing Utilization Error

- 6) Create a pivot table to see the volume of prefixes with the error message of “Missing BUILDER File”
 - a. Sort by descending volume of serial numbers

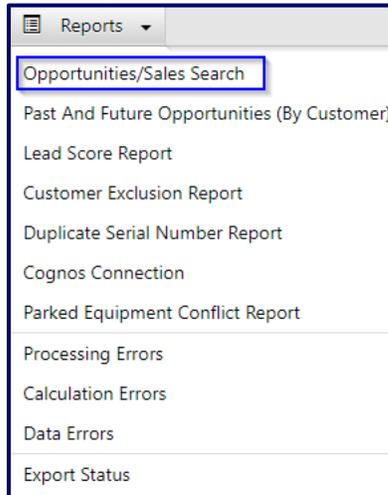
	A	B
1	Error Message	Missing BUILDER File
2		
3	Row Labels	Count of SerialNo
4	000	92
5	LCE	43
6	7NF	33
7	7YF	33
8	4SG	30
9	KHB	26
10	K04	22
11	7GJ	21
12	E7F	17
13	BMW	17
14	9PR	16
15	E4H	16

- 7) Focus on developing Dealer BUILDER files for the largest volume serial number prefixes that Caterpillar does not have BUILDER files for

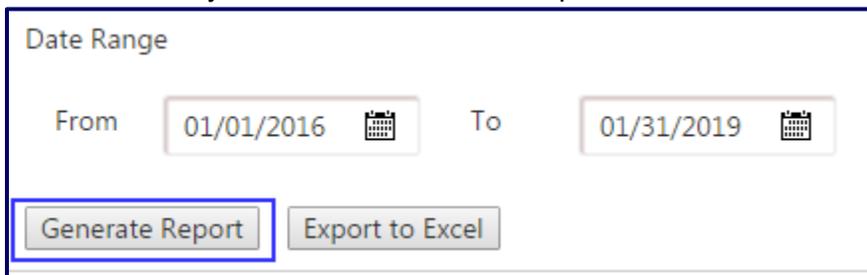
2.10.2.2 How to Identify High Volume and High Opportunity Value Serial Number Prefixes

In most cases, Dealers will already have a good understanding of their top volume and top value opportunity models. These can be validated by completing the following process:

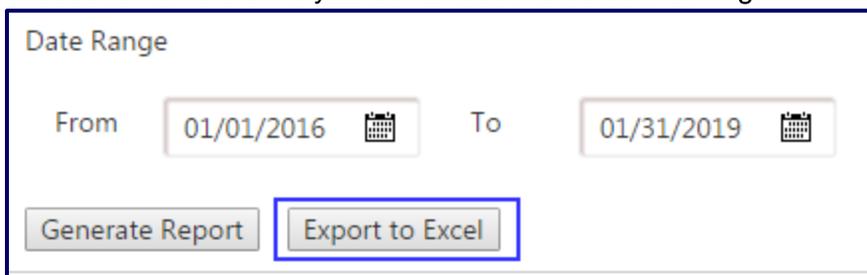
- 1) In the OLGA web application, navigate to the Reports Menu → Opportunities/Sales Search



- 2) Filter the selection to the next 3 years and hit “Generate Report”



- 3) Export the report to Excel
 - a. You can choose to name the file yourself or use the default naming.



- 4) Download the report from the Reports Menu → Export Status and open the file in Excel

Export Status 🌐 - In Central Standard Time				
#	File Name	Request Date (MM/DD/YYYY)	File Export Status	Download
1	Opportunities Search	10/08/2015 11:04:16 PM	Ready for Download	Download

- 5) Navigate to the Opportunity tab and set up a pivot table of total opportunity by serial number, including the prefix alongside the serial number

Sum of Opport			
SerialNo	Serial No Prefix	Model	Total
01X01342	01X	769C	7,858,513
01X01531	01X	769C	7,680,579
01X01587	01X	769C	383,095
01X06715	01X	769C	526,511
01Z12308	01Z	3208	23,222
01Z20230	01Z	3208	41,667

- 6) Copy and paste this table as values into a new tab in the Workbook
- 7) From this copied table, create another pivot table with the count of unique serial numbers and total opportunity by serial number prefix
 - a. Sort by descending total opportunity

Row Labels	Count of SerialNo	Sum of Total
FKR	42	1,573,823,778
FAL	408	1,316,446,775
9EM	82	639,261,087
MSY	10	520,413,558
L4E	51	505,970,630
MZD	131	478,638,286
WDM	30	441,741,584
SLT	3	436,076,905
S6X	95	387,113,286

- 8) Focus efforts on reviewing the BUILDER files for the top value and top volume serial number prefixes
 - a. These will have the largest impact on the accuracy of the OLGA opportunity data

2.10.3 How to upload Dealer BUILDER file(s) into OLGA

- 1) In the OLGA web application, navigate to the Configuration Menu → Dealer BUILDER File Upload



- 2) Determine Serial Number Prefix to be uploaded
- 3) Upload BUILDER G3 XML File to OLGA Web Application
 - a. Select “Add BUILDER File”

Dealer BUILDER File Upload

 Add BUILDER File

(Upload only .XML or .ZIP file)

- b. Once BUILDER file is selected, Dealer will be able to view status of upload

Upload Status

Page : 1 | Total Record(s) : 0 | Show Records

File Name	Status	Updated By	Updated Date (MM/DD/YYYY) 
-----------	--------	------------	--

- 4) Correct any upload errors found in the BUILDER file and upload again, if needed
- 5) Add any Dealer Part Numbers used in Dealer BUILDER File to Dealer Parts Configuration Page (See **Section 2.9 Dealer Parts Upload**)
- 6) Request recalculation of Dealer Data via email to the OLGA Cat Admin email (**OLGA_CatAdmin@cat.com**)
 - a. While opportunity run is in process, **do not** delete or upload a new Dealer BUILDER file
- 7) Confirm the Dealer BUILDER File was used in Opportunity Calculation
 - a. View updated opportunities in the Opportunities/Sales Search Report
- 8) Maintain Dealer BUILDER Files at least yearly for 'Cancelled/Replaced By' Parts, Reman Options, Changes in Dealer Repair Strategy, etc.

If the Dealer BUILDER File Upload Fails

- Error details can be found under the Builder errors section on the page
- The rows can be expanded/collapsed to show a description(s) specifying the errors that prevented the file from being uploaded to OLGA.
- Columns can also be sorted by File Name, Manufacturer Name, Product Family, Model, Begin SN, End SN, Updated By & Updated Date.

BUILDER Errors

Page : 1 | Total Record(s) : 1 | Show 100 Records

	File Name	Manufacturer Name	Product Family	Model	Begin SN	End SN	Updated By	Updated Date (MM/DD/YYYY)
▼	BUILDER_OLGA_785 C _APX00001-APX99999.xml	Caterpillar - AA	OHT & TRACTORS/AT	785 C	APX00001	APX99999	Button Lori L	07/16/2019 10:52 AM
<p>Error Details</p> <p>Overlap Range</p> <ul style="list-style-type: none"> • File Overlaps with APX00608 AND APX00608 								

Note: Avoid using a space in the File Name to ensure smooth upload

2.11 BUILDER Files

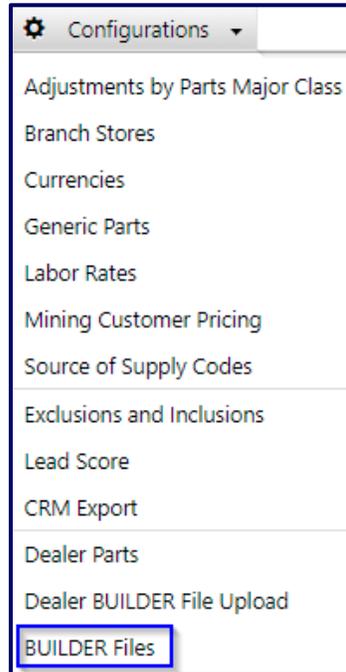
If a Dealer chooses to upload a modified Caterpillar OLGA BUILDER file, this can be done for reasons that the repairs or intervals for specific machines in their territory are different from the repairs or intervals in the Caterpillar OLGA BUILDER files.

2.11.1 How to Download a Cat BUILDER File

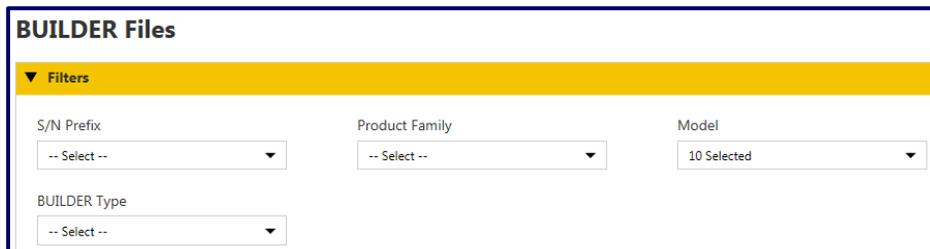
If the Dealer wishes to view or amend a Cat standard BUILDER file, the following process describes how to download the Cat standard BUILDER files



1) In the OLGA web application, navigate to the Configuration Menu → BUILDER File



2) Use the Serial Number Prefix, Product Family or Model filters to find the desired BUILDER file.



3) Select the Export box for the desired BUILDER files and click on the “Export” button.

Page : 1 | 2 3 4 5 6 7 8 9 10 11 | Total Record(s) : 7510 | Show 50 Records | Export

Manufacturer Name	Product Family	Model	Begin SN	End SN	Arrangement Number	BUILDER Type	Notes	Updated By	Updated Date (MM/DD/YYYY)	Export	Delete
Caterpillar	GENERATORS	1000S_UPS	CZS00001	CZS00001		CAT		OLGAADMIN	05/09/2016 04:02 AM	<input checked="" type="checkbox"/>	
Caterpillar	GENERATORS	1000S_UPS	CZS00002	CZS00002		CAT		OLGAADMIN	05/09/2016 04:02 AM	<input type="checkbox"/>	
OLGA Copies - Across Series	GENERATORS	1000Z_UPS	EDZ00001	EDZ99999		CAT GENERIC 2	Copied From - 1000S_UPS CZS(CZS00001)	OLGAADMIN	05/09/2016 04:02 AM	<input type="checkbox"/>	
OLGA Copies - Across Series	MOTOR GRADERS	12	06M00001	06M99999		CAT GENERIC 2	Copied From - 12G 61M	OLGAADMIN	05/09/2016 04:02 AM	<input type="checkbox"/>	

4) Navigate to the Reports Menu → Export Status and download the BUILDER file.

Export Status 🌐 - In Central Standard Time				
#	File Name	Request Date (MM/DD/YYYY)	File Export Status	Download
1	BUILDER_OLGA_320D_A6F00001-A6F99999	10/19/2015 07:10:41 PM	Ready for Download	Download

- 5) Open the BUILDER file in BUILDER G3 and review or modify (e.g. Serial Number Range, Intervals, Repair Options, Parts Lists, etc.).

Best Practice: The Dealer repair history data should support all changes, and the export of the BUILDER G3 file should be in XML format.

To compare the Caterpillar OLGA BUILDER file and the Dealer BUILDER file, use the BUILDER G3 Compare and Copy feature within the Edit menu.

2.11.2 Creating/Modifying BUILDER Files

There are a number of considerations when creating or modifying a BUILDER file. These are described in the following sections:

2.11.2.1 BUILDER G3

Dealers have the option to modify the Caterpillar OLGA BUILDER files and to upload their own. In either case, it is important that the required fields from BUILDER G3 are used for a successful calculation using OLGA logic.

For more information about BUILDER G3, please view the following website:

<https://dealer.cat.com/en/ps/service/service-data-process-standards.html>

2.10.2.2 BUILDER File: Equipment Tab

For a successful opportunity calculation using a Dealer BUILDER file, the following elements are required. The Dealer BUILDER file must incorporate the Beginning Serial Number and End Serial Number (including the Serial Number Prefix and Serial Number Range).

S	Manufacturer	Family	Model	Begin SN	End SN	Flat Rate Exchange	Base SN	Parts Manual	Parts Manual Date	Last Update	Note
P	Caterpillar	MOTOR GRADERS	120H	12400001	12499999			SEBP3683	6/4/2003	6/13/2014	Copied From - 120M
P	Caterpillar	MOTOR GRADERS	120H	SFM00001	SFM99999					6/13/2014	Copied From - 120M
P	Caterpillar	MOTOR GRADERS	120H	CAF00001	CAF99999					6/13/2014	Copied From - 120M

Best Practice: If uploading a Cat Generic 1 or Cat Generic 2 OLGA BUILDER file, be sure to change the Caterpillar BUILDER file description from AB or AC to "AA Caterpillar" before uploading the modified Dealer BUILDER file in OLGA.

S	Model	Manufacturer	Begin SN	End SN	Base SN	Family	Note
P	10005_LPS	Caterpillar	C2500001	C2500001	C2500001	GENERATORS	
P	10005_LPS	Caterpillar	C2500002	C2500002	C2500002	GENERATORS	
P	12	OLGA Copies - Across Series	06M00001	06M99999	06M	MOTOR GRADERS	Copied From - 12G 63M
P	12	OLGA Copies - Across Series	08T00001	08T99999	08T	MOTOR GRADERS	Copied From - 12G 63M
P	12	OLGA Copies - Across Series	70D00001	70D99999	70D	MOTOR GRADERS	Copied From - 12G 63M
P	12	OLGA Copies - Across Series	71D00001	71D99999	71D	MOTOR GRADERS	Copied From - 12G 63M
P	12	OLGA Copies - Across Series	80C00001	80C99999	80C	MOTOR GRADERS	Copied From - 12G 63M
P	12	OLGA Copies - Across Series	94C00001	94C99999	94C	MOTOR GRADERS	Copied From - 12G 63M
P	120_LPS	Caterpillar	0N600001	0N600001	0N600001	GENERATORS	
P	12005_LPS	Caterpillar	CZ700001	CZ700001	CZ700001	GENERATORS	
P	12005_LPS	Caterpillar	CZ700002	CZ700002	CZ700002	GENERATORS	
P	12005_LPS	Caterpillar	CZ700003	CZ700003	CZ700003	GENERATORS	
P	120G	Caterpillar	87V00001	87V99999	87V00001	MOTOR GRADERS	Copied From - 120M
P	120G	AA - OLGA Copies - Same Series	49C00001	49C99999	49C00001	MOTOR GRADERS	Copied from - 120G 87V
P	120G	AA - Caterpillar	11W00001	11W99999	11W	MOTOR GRADERS	Copied From - 120M 89C
P	120H	AA - OLGA Copies - Same Series	12400001	12499999	124	MOTOR GRADERS	Copied From - 120M
P	120H	AC - OLGA Copies - Across Series	2AN00001	2AN99999	2AN	MOTOR GRADERS	copied from 120H - 5PM
P	120H	AC - OLGA Copies - Same Series	3GR00001	3GR99999	3GR	MOTOR GRADERS	copied from 120H - 5PM
P	120H	OLGA Copies - Same Series	49K00001	49K99999	49K	MOTOR GRADERS	copied from 120H - 5PM
P	120H	OLGA Copies - Same Series	69M00001	69M99999	69M	MOTOR GRADERS	copied from 120H - 5PM
P	120H	OLGA Copies - Same Series	67M00001	67M99999	67M	MOTOR GRADERS	copied from 120H - 5PM
P	120H	OLGA Copies - Same Series	61N00001	61N99999	61N	MOTOR GRADERS	copied from 120H - 5PM
P	120H	OLGA Copies - Same Series	9FN00001	9FN99999	9FN	MOTOR GRADERS	copied from 120H - 5PM
P	120H	OLGA Copies - Same Series	91R00001	91R99999	91R	MOTOR GRADERS	copied from 120H - 5PM
P	120H	OLGA Copies - Across Series	5PM00001	5PM99999	5PM	MOTOR GRADERS	Copied From - 120M

Best Practice: For Engine BUILDER files, the Arrangement number must be populated in the Parent Arrangement No field for combined repair options, and must populate in the Arrangement No for simple repair options.

2.11.2.3 BUILDER File: Repair Option Tab

With each Dealer BUILDER file, there also must be at least one repair option per component for all major and minor components including PMs with fluids. All repair options must contain:

- Component Code
- Job Code
- Component Quantity (if there are multiple quantities, a Modifier Code is required, such as right, left, front, back, etc.)
- Work Application Code (if the sequence repair and repair options are different)

Each component must have at least one repair option. There is no requirement to having both a before and after failure event; however, there only needs to be one. First Interval, Next Interval, and Standard Hours must be added.

RO Type	Has Parts	Shop Field	Comp	Job	Mod	Qty	Loc	Work App	Job Cond	Cab	Group No	SMCS Description	Price Hrs	Price Store	Labor Code	First Interval	Next Interval	Comp Qty	Std Hrs	Tgt Hrs	Dwn	Business Group	Internal Note	External Note	Additional Note
P	S	Y	S	1000	007						199-5055	ENGINE RECONDITION AFTER FAILURE	1.00	**	SHP	10000	10000	1	1.00	1.00	1.00				
P	S	Y	S	1000	010						199-5055	ENGINE REMOVE & INSTALL	27.00	**	FLD	10000	10000	1	27.00	27.00	27.00				
P	C	Y	S	1000	020						199-5055	ENGINE RECONDITION	47.00	**		10000	10000	1	47.00	47.00	47.00				
P	S	N	S	1000	047						*	ENGINE TUNE-UP	1.00	**	SHP	1	99999	1	1.00	1.00	1.00				Miscellan...
P	S	Y	S	1052	007						187-1603	TURBOCHARGER RECONDITION AFT...	0.50	**	SHP	5000	5000	1	0.50	0.50	0.50				
P	S	Y	S	1052	010						187-1603	TURBOCHARGER REMOVE & INSTALL	1.00	**	FLD	5000	5000	1	1.00	1.00	1.00				
P	S	Y	S	1052	020						187-1603	TURBOCHARGER RECONDITION	1.00	**	SHP	5000	5000	1	1.00	1.00	1.00				
P	S	N	S	1250	023						*	FUEL SYSTEM REPAIR	0.00	**	FLD	1	99999	1	0.00	0.00	0.00				
P	S	Y	S	1256	007						196-1907	FUEL TRANSFER PUMP RECONDITIO...	0.50	**	SHP	5000	5000	1	0.50	0.50	0.50				

Example 1:

A Dealer has an Axle Differential Assembly repair option. This repair option can be for the entire assembly and all of its components or for each of the components individually (Axles, Differentials, Brakes, and Final Drive).

Input for OLGA BUILDER: The Dealer should list the individual repair options that should be used in the Caterpillar OLGA BUILDER file.



Best Practice: OLGA opportunity calculation logic only uses the SMCS Codes for Component Code, Job Code, Modifier Code and Work Application Code of the BUILDER file. When the Dealer makes the necessary adjustment to the OLGA BUILDER file, pay attention that duplicates are not created!

The OLGA opportunity logic would first look at the specified codes (Component Code, Job Code, Modifier Code and Work Application Code). If there were more than one repair option with the same set of codes, the OLGA roll-up logic will average the different repair options into one opportunity.

If there are repairs at both the group and component level, then the opportunity will be calculated for each and incorrectly duplicated. The Dealer should decide whether to choose either the group or the individual component repair options, and the other should be eliminated.

2.11.2.4 BUILDER File: Job Parts Tab

With each repair option, there must be a parts consist, such as a Part Number, Source of Supply Code, Quantity, Part Description, and Replacement Percentage.

Part Type	SIS Ref No	Group No	SIS Type	Part Number	SOS Code	Misc Charge	Qty	Part Description	Unit Price	Repl %	Core Charge	Extended Price	Plus FR Ex	Note	Last Update	Seq
C		172643	GP	113-6087	000		1.00	CRANKSHAFT GP	\$0.00	0		\$0.00	0		4/22/092	1
C	1	1136087	AS	271-9658	000		1.00	CRANKSHAFT A	\$4,303.43	0		\$0.00	0		5/24/2013	2
R			Asa	0R-2805	000		1.00	CRANKSHAFT A UPGRADE TO	\$3,656.56	0	\$0.00	\$0.00	0	Original Part 1051725	5/24/2013	3
R			Asa	0R-2808	000		1.00	CRANK A (.500MM UNDERSIZE	\$1,935.85	0	\$0.00	\$0.00	0	Original Part 1051725	5/24/2013	4
C	1A	1136087	PT	18-8705	000		1.00	Key-woodruff	\$0.47	100		\$0.47	0		5/24/2013	5

3. OLGA Calculation and Logic

The OLGA opportunity calculation logic consists of many different parts. An understanding of the foundational logic of each part will help determine by whom and how OLGA output can be used in the Dealer's existing lead management and/or CRM processes.

3.1 Data Inputs

OLGA calculates opportunities based on inputs from 4 key sources:

- 1) Dealer Data
- 2) BUILDER files
- 3) Caterpillar Area Parts Price File
- 4) SMU and Utilization Rate Data

These are explained in detail in the following sections.

3.1.1 Dealer Data

Prior to deploying OLGA, Dealers must complete the data mapping from their ERP system whereby data is transferred to Caterpillar. This involves sending invoices and work orders for the past 5 years, along with current customer and equipment files. Having a long history of invoices and work orders better enables OLGA to forecast when future repairs will be due.

Data is sent to the Dealer SI mailbox where it is extracted and used by OLGA in data calculations. OLGA uses this data in the calculation logic to generate opportunities. Dealer data inputs include:

- Customer File
- Equipment File
- Work Orders
- Invoices

The data fields provided by Dealers during the data mapping process are used in OLGA either to allow configurations to filter data or to report data. The following tables show the fields used in OLGA and the purpose of their use.

3.1.1.1 Customer File Data Example

Dealer Customer Data OLGA usage			
Data Sent To Cat	Exclusion / Inclusion	Reporting	Other
Customer Name		X	
Customer Number	X	X	
Parent Customer Number		X	
Key Account Indicator		X	
Primary Store Number	X	X	
Country		X	
State	X	X	
County	X	X	
Location	X		
Address Type			OLGA will for the primary address Selection Hierarchy: 1) Main Office 2) Site Address 3) Billing Address If multiple addresses exist for the same type: address with the most recent last update timestamp will be chosen. If no addresses exist the customer's equipment will show a blank address.
Division Code	X	X	
Industry Code	X	X	OLGA will show data for the primary industry
Sales Rep Number	X	X	
Sales Rep Name		X	
Sales Rep Type			OLGA will show data for the primary Sales Rep Selection Hierarchy: 1) Product Support 2) Account Rep 3) ISR 4) Machine 5) Engine 6) Rental 7) Hydraulic Specialist 8) Undercarriage Specialist 9) GET Specialist 10) Other

3.1.1.2 Equipment File Data Example

Data Sent to Caterpillar	Exclusion/ Inclusion	Reporting	Other
Manufacturer Code		X	Caterpillar equipment will be calculated and counted in the Dealer population
Manufacturer Name			Caterpillar equipment will be calculated and counted in the Dealer population
Model		X	
Serial Number	X	X	Matches equipment to BUILDER file
Manufacturer Year		X	Used to calculate age for reporting. Age is not used in OLGA calculation logic
Division Code		X	Matches equipment to customer division
Customer Number	X		Matches equipment to customer division
SMU Value			Used to calculate utilization rate (under review)
SMU Date			Used to calculate utilization rate (under review)
Territory Indicator	X		
Contract Type		X	
State and End Date			Used to identify if opportunity falls within contract
State and End SMU			Used to identify if opportunity falls within contract
Principle Work Code		X	
Application Code		X	

3.1.1.3 Work Order Data

5 years of work order data is sent to Caterpillar initially and ongoing incremental data is sent at least monthly. Work order data sent by Dealers is used to identify when repair events were last completed in order to forecast when they will next be due. OLGA also uses the work order data to allow filtering and reporting based on work order attributes. The SMU data captured during the Dealer work order process is an input into the SMU and Utilization Rate calculation.

3.1.1.4 Invoice Data

Invoice data sent by Dealers is aggregated in OLGA for the configured SOS codes, to report sales and enable the POPS and POLS calculations. It is also used by the OLGA calculation to match sales to opportunities and adjust future opportunity forecasts.

3.1.2 BUILDER Files

BUILDER files are used in OLGA to determine the repair sequence for each equipment unit. They outline the maintenance and repair events by job and component code throughout the equipment lifecycle. OLGA

matches serial numbers to Caterpillar OLGA BUILDER files to generate specific opportunities. BUILDER files are published for each new machine and engine and are available to view on <https://smi.cat.com>.

3.1.2.2 Calculator

Calculator is a Caterpillar application that generates opportunities for a specific serial number. The user can enter equipment specific information to determine the projected repairs for that equipment.

Calculator is used by Dealers for multiple reasons, including a basis to determine CSAs. BUILDER files are also used as a foundation for Calculator logic. OLGA opportunity generation logic was modeled after Calculator logic. The difference is that Calculator does not project repair dates.

Calculator data is created using:

- BUILDER files → repair options (SMCS codes), next interval, labor hours and parts list
- Parts Price file → Parts Prices
- Calculator Configurations → Labor rate, default ratio for before and after failure options, and define included cost categories

OLGA uses Calculator data, but also incorporates the following additional data:

- Dealer Configurations → Labor rate and generic part prices
- OLGA configurations → Default ratio default for before and after failure options and define included cost categories
- Caterpillar Data → Utilization Rate and current SMU estimates

3.1.3 Caterpillar Area Parts Price File

BUILDER files identify the sequence of repair events for an equipment unit. OLGA combines this information with the local area parts price file for each Dealer to provide pricing for the parts component of the OLGA opportunity events in the Dealer's local suggested customer list price. If the Dealer does not sell to customers at the suggested customer list price, the Adjustment by Parts Major Class configuration must be used. Refer to **Section 2.6.2 Adjustments by Parts Major Class Configuration**.

For the labor component of the opportunity event, the Dealer labor rate(s) is/are applied. Refer to **Section 2.6.6 Labor Rates Configuration**.

3.1.4 SMU and Utilization Rate Data

After identifying the timing sequence of the repair events from the BUILDER files, OLGA calculates when the repair events are due. To do this, OLGA uses the SMU and a calculated monthly utilization rate for each individual serial number. Full details on the Utilization Rate calculation are in section **3.4 Utilization Rate Logic**.

SMU, or Service Meter Unit, is the estimated current hours on the machine at the time of the OLGA monthly run. For example, if the last SMU point from a Work Order was 9,900 hours in July and a Utilization Rate of 100 hours per month was calculated, then in the August run for OLGA the current SMU would be 10,000 (9,900 + 100 hours). In September current SMU would be 10,100. The monthly Utilization Rate will give you the usage.

No matter what month or date range is selected, the current SMU and Utilization Rate will always be the same. It allows for a reference point when changing date ranges to see where the machine is estimated to be at in its life today.

Example 1:

The BUILDER file determines an engine recondition is due for a D6R track type tractor with serial number prefix 4TR at 10,000 hours. The current SMU for serial number 4TR12345 is 9600 hours and its monthly utilization rate is 200 hours.

OLGA uses this information to determine that the engine recondition will be due in 2 months' time.

3.2 Dealer Data and Cleanliness

3.2.1 Dealer Data Integrity Process (DDIP)

Accuracy of the dealer's data can have a significant impact on OLGA. The Caterpillar Dealer Data Integrity Process (DDIP) is a service offered by Caterpillar to help improve data cleanliness for customer and equipment data. Today, 71 dealers globally are currently participating in the DDIP.

The DDIP includes customer data cleansing, equipment data cleansing, in territory reporting and out of territory reporting. This service to dealers involves:

- Validating legal name and address information
- Identifying and listing duplicate accounts
- Reporting data quality issues for unmatched records
- Enriching customer data

This data helps Cat Dealers gain deeper customer insights, ultimately improving data quality for Dealer's marketing initiatives and enhances accuracy of customer information for Dealer use in various applications. This is a best in class process that can be leveraged to save Dealers time and money.

For more information, visit <https://dealer.cat.com/en/bt/marketing/ddip.html>

3.2.2 Dealer Interface Center of Excellence (DICE)

Dealer Interface Center of Excellence (DICE) provides the documentation for Interfaces between Caterpillar and Dealers. These documents provide the information necessary to properly map data to and from Caterpillar.

Some of the data fields provided by Dealers during the data mapping process are used in OLGA either to allow configurations to filter data or to report data. OLGA also provides data fields for Dealers to bring information back into their Customer Relationship Management (CRM) system.

For more information, review the "OLGA DICE Documents Access Instructions (Mapping)" document posted on <https://dealer.cat.com/olga> under the *Administration* section.

3.3 Opportunity Calculation Logic

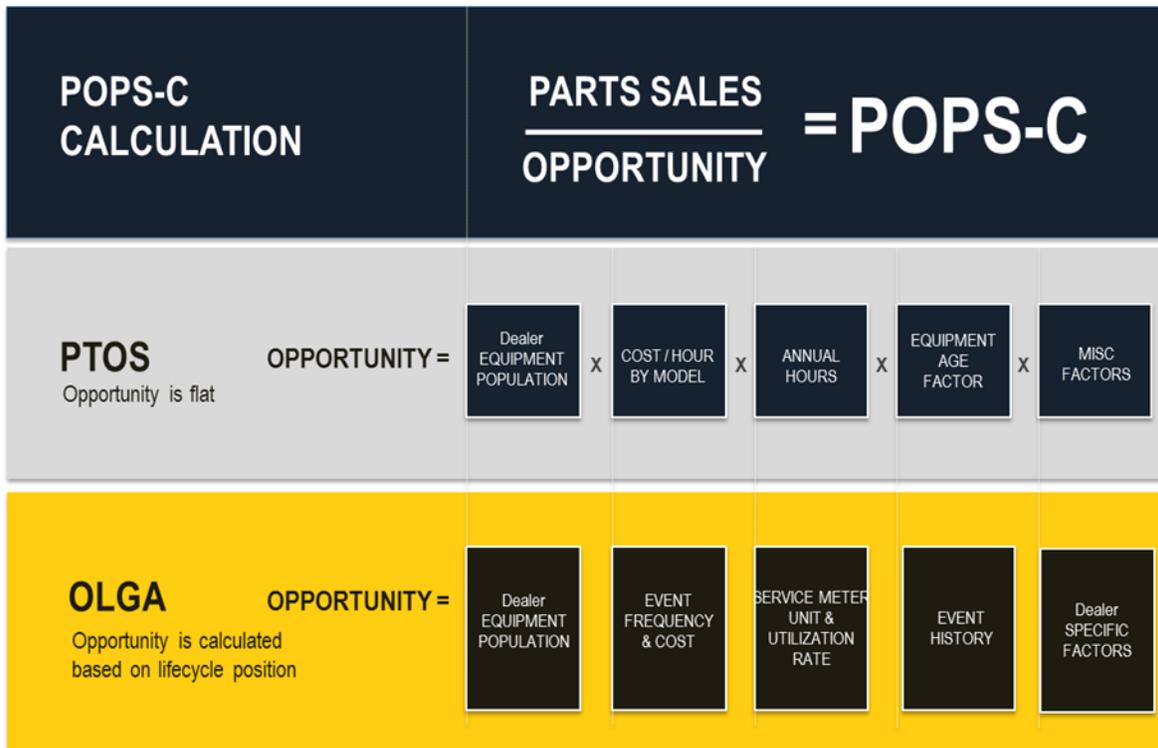
Opportunity is calculated in OLGA using 5 calculation logic paths:

- Machine
- Standby Engine
- Diesel Engine
- Captive Engine
- Commercial Engine (General, Marine, and Petroleum)
- Truck and Pleasure Craft Engine

The logic is described in detail in the following sections.

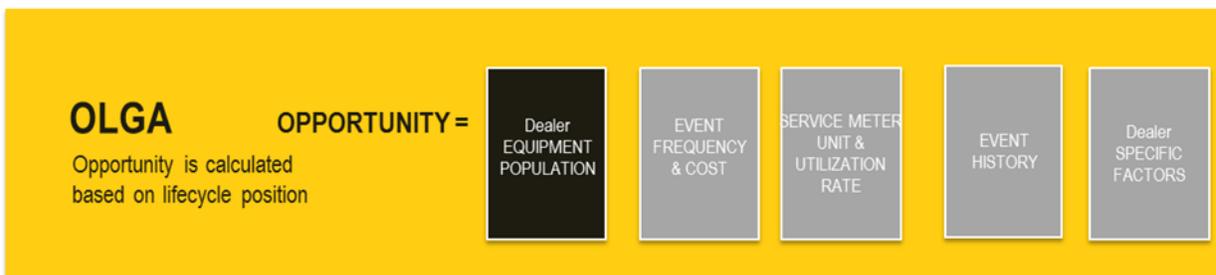
3.3.1 Machine Opportunity Calculation Details

OLGA calculates machine opportunity differently from PTOS. PTOS calculation uses inputs such as cost per hour and average annual hours, which will result in a value of opportunity. OLGA uses inputs such as event cost and frequency, and utilization rate, which results in opportunity for a specific repair option.



3.3.1.1 How to Calculate Opportunities for Machines

-  **1) Dealer sends Caterpillar their equipment file each month.**



- a. For each serial number in the Dealer’s equipment population (minus any excluded units), opportunity is calculated.
- b. This example will focus on one serial number, 4TR12345, a D6 Track Type Tractor.
 - i. Caterpillar reads the serial number from the Dealer’s equipment file and matches it to the Caterpillar master data to identify the model and product family.
 - ii. If the Dealer has incorrectly scored the machine, there may be a difference between the Dealer model and the Caterpillar model.

SN = 4TR12345
 Model = D6R
 Product Family = Track Type Tractor

2) Caterpillar identifies an appropriate BUILDER file based on the machine serial number.



- a. BUILDER files are typically for an entire prefix.
- b. In this case, OLGA will use the BUILDER file for range 4TR00001 – 4TR99999.

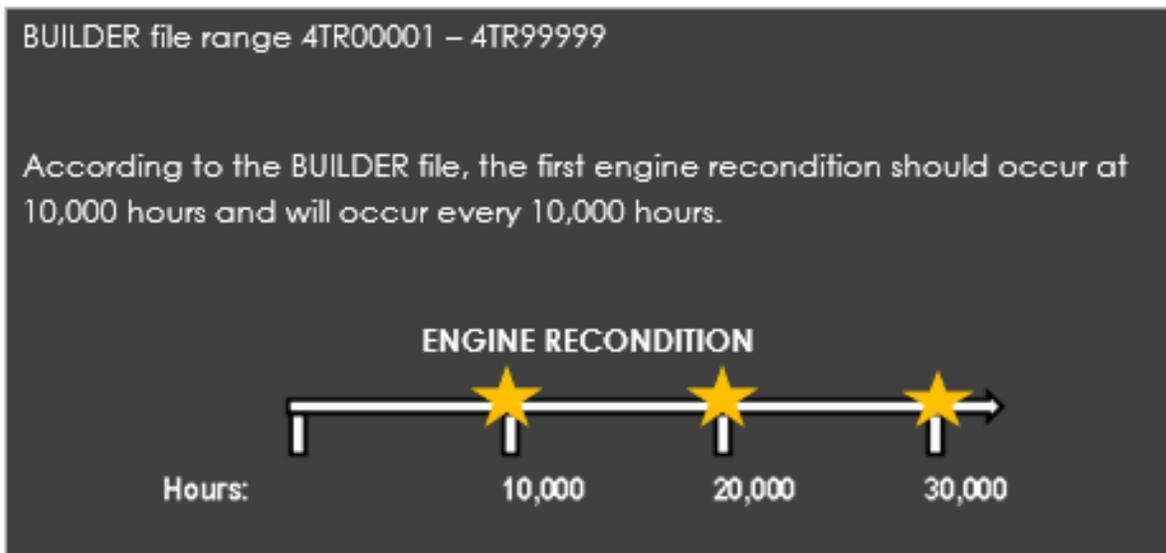
BUILDER file range = 4TR00001 – 4TR99999

3) Caterpillar creates a time series of repair events in the BUILDER file.

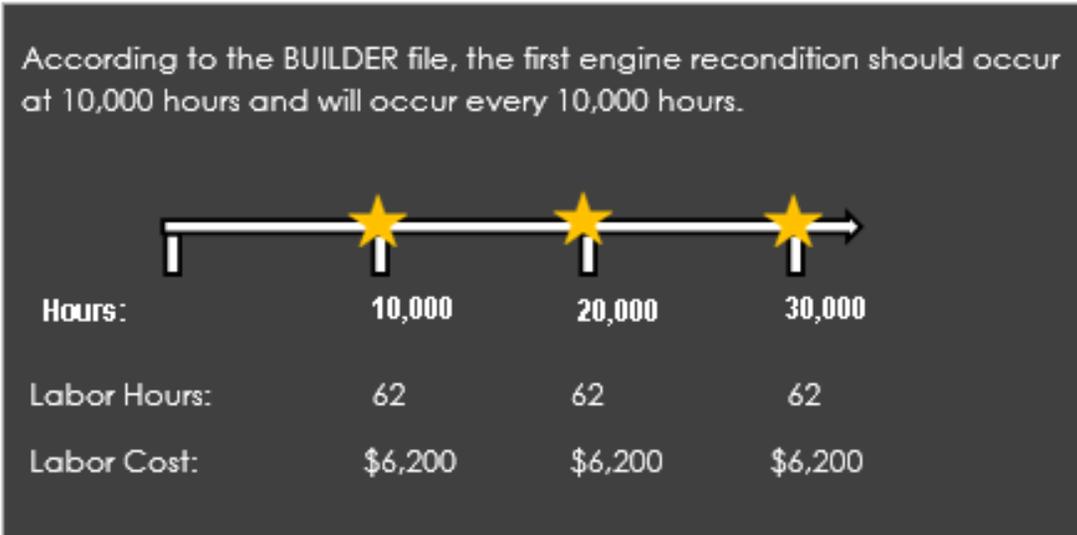


- a. BUILDER files contain many repairs for each machine.

- b. OLGA extracts the repair events from the BUILDER file and creates a time series for each unique repair.
- c. In this example, we are going to focus on one repair – an engine recondition.
 - i. The BUILDER file for 4TR00001 – 4TR99999 states that engine reconditions for this model should occur at 10,000 hours and every 10,000 hours thereafter.

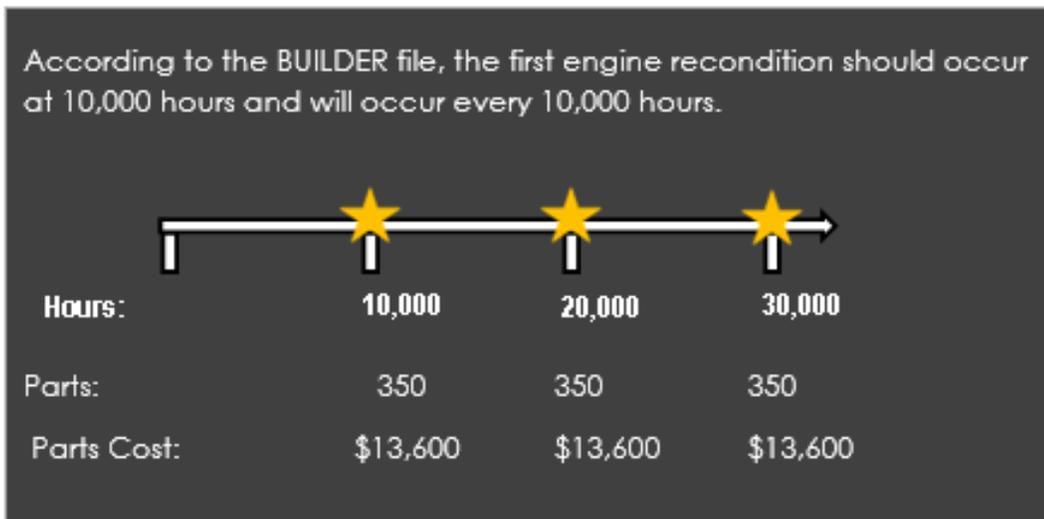


- 4) **Caterpillar identifies a labor value for each repair event.**
- a. The BUILDER file contains the number of labor hours required to complete each repair.
 - b. In the case of an engine recondition on a D6R with serial number prefix 4TR, it requires 62 hours of labor.
 - c. OLGA then sources the Dealer configured labor rate (see [Section 2.6.6 Labor Rates Configuration](#)) and multiplies the number of hours by the labor rate.
 - d. For this example, assume a labor rate of \$100 per hour, meaning the labor cost for each engine recondition will be \$6,200 (62 hours x \$100 per hour).



5) Caterpillar identifies a parts value for each repair.

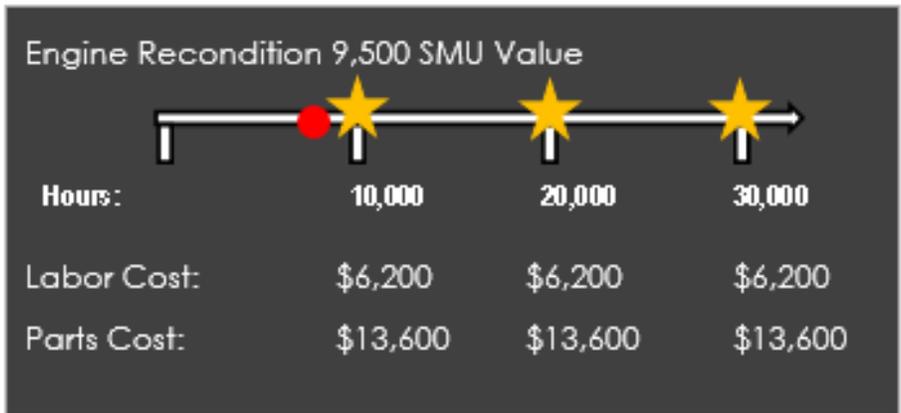
- a. The BUILDER file contains the parts list required to complete the repair. Prices are derived from the Caterpillar Area Parts Price File (see **Section 3.1.3 Caterpillar Area Parts Price File**) and are adjusted based on any existing Adjustment by Parts Major Class configuration (see **Section 2.6.2 Adjustments by Parts Major Class Configuration**).
- b. For this example, there are 350 parts required to complete the job, at a total cost of \$13,600.



6) Caterpillar identifies the current SMU and calculates the monthly Utilization Rate.

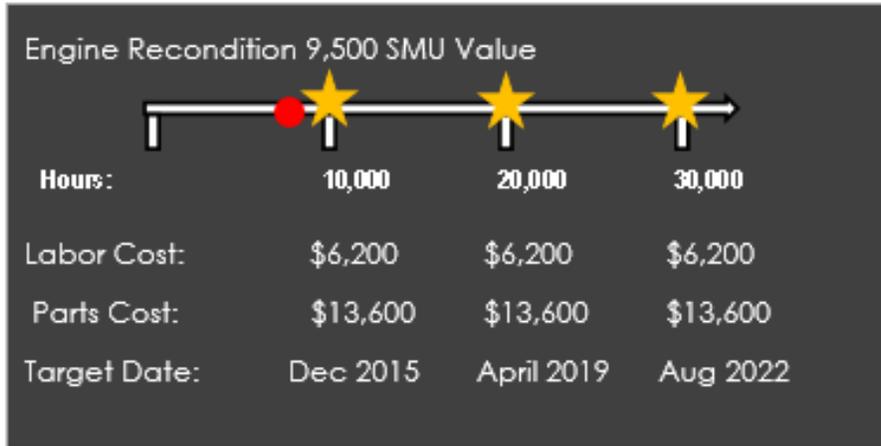


- a. Caterpillar uses multiple sources of data to calculate an SMU value and monthly Utilization Rate.
 - i. The full details of this calculation are in [Section 3.4 Utilization Rate Logic](#).
- b. For this example, serial number 4TR12345 has an SMU of 9,500 and a monthly Utilization Rate of 250 hours.



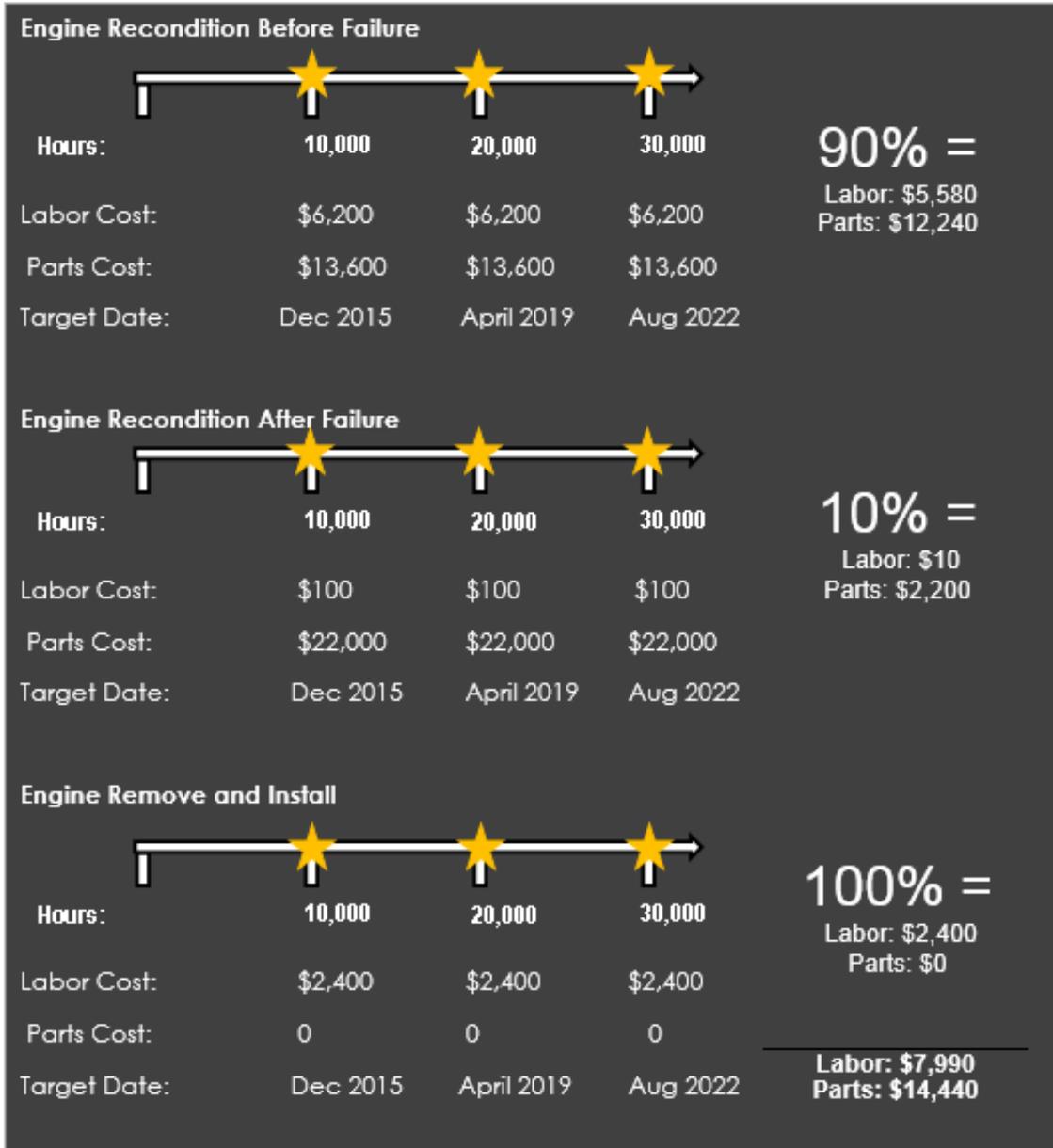
7) Caterpillar calculates when the next repair options are due.

- a. Based on the current SMU of 9,500 hours, the target SMU of 10,000 hours for the repair and the Utilization Rate of 250 hours, OLGA predicts the engine recondition will occur in two months.

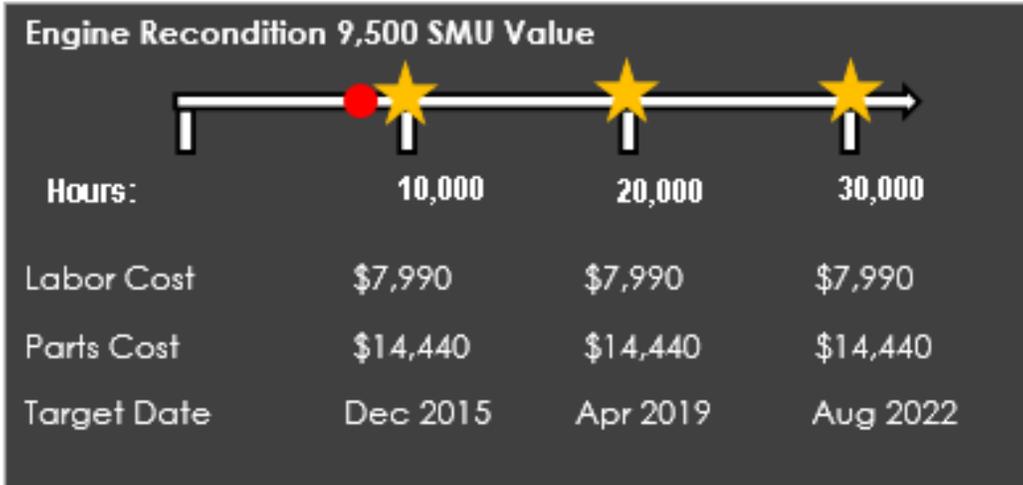


8) Caterpillar calculates one repair option for all repairs with a before and after failure option.

- a. An engine can be reconditioned before or after failure with differing costs. If a repair has a before or after failure option, OLGA calculates one repair option consolidating:
 - i. 90% parts and labor value before failure
 - ii. 10% parts and labor after failure
 - iii. 100% parts and labor for remove and install
- b. OLGA reports will only show a total amount of calculated opportunity for the engine recondition as shown in the example.



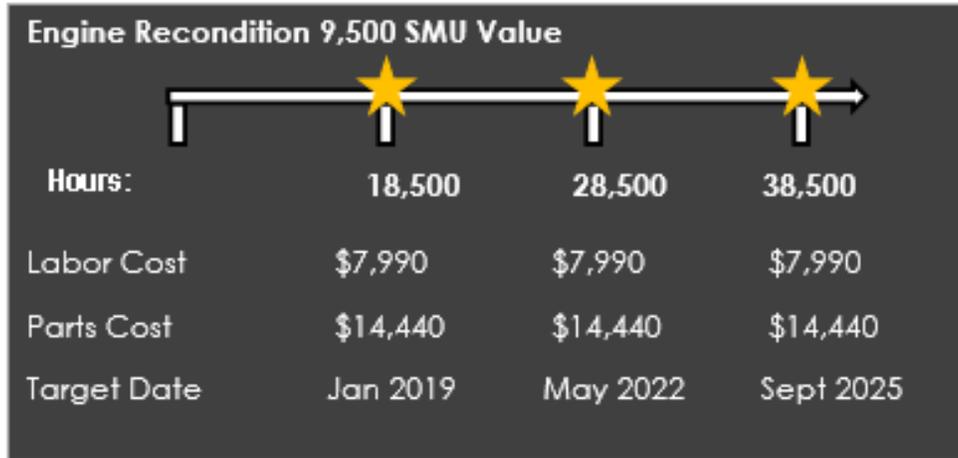
- c. The calculation results in \$7,990 of labor opportunity and \$14,440 of parts opportunity. In the OLGA Opportunity/Sales Search report, the single repair option will display the aggregated opportunity values. Users will be able to view the before failure, after failure, and remove and install cost breakdown in the opportunity details window.



9) Caterpillar adjusts all future opportunities based on the date of the last repair event.



- a. OLGA adjusts future opportunities based on when the last event occurred. For example, the first engine recondition for serial number 4TR12345 happened early, at 8,500 hours in September 2015. OLGA adjusts the future events to intervals of 10,000 (the same interval per the BUILDER file) from 8,500 hours. i.e. 18,500, 28,500, 38,500 hours and so on. The target dates adjust accordingly.



- b. OLGA shows all repair options for the past 3 years and future 3 years as opportunities for all included Cat equipment in the Dealer’s equipment population.
- c. Opportunities will be calculated for excluded serial numbers, but they will not be displayed in the OLGA reports or in the customer and Dealer totals.

3.3.2 Engine Opportunity Calculation Details

The principles of the opportunity calculation for machines hold true for engines. However, the following differences apply:

- Engine BUILDER files do not contain overhaul intervals.
- Engine BUILDER files are based on serial number prefix and the engine arrangement number/power rating.
- Engine BUILDER files will use cumulative PMs.

3.3.2.1 Commercial Engines (General, Marine, Diesel, & Petroleum)

The engine opportunity calculation logic is different logic than machine opportunity calculation logic because engine Builder files do not contain overhaul intervals. Diesel and Gas engines take into consideration a load factor when calculating their intervals. Engine repair intervals are calculated based on the engine model, engine rating (power), and engine application. The Utilization Rate is calculated in hours.

Unlike machines and other engines, commercial engines use the serial number prefix and engine arrangement number along with calculated Builder File intervals. These Builder Files include placeholder values in the Top End, In Frame, & Major Overhaul intervals (for example: 1, 2, & 3). Actual hours must be calculated, and those calculations are based on fuel consumption. The required information for the hour calculation is serial number prefix, engine arrangement number, test specification number, power rating,

and load factor. The website <https://smi.cat.com> provides a .zip file containing “Commercial Engine Performance Data Files”. OLGA uses the Engine Base Data and Engine Performance Data files.

Note: OLGA's engine interval calculations have been verified to be correct. Calculated intervals may differ from Operation and Maintenance Manual.

3.3.2.2 Captive Engines

If the prime product serial number is non-Cat, then OLGA will identify the related component serial number. If the component serial number is Cat, then the opportunity will be calculated. The most common occurrence of this is for On-Highway Trucks. The Utilization Rate is calculated in hours. Similar to machines, captive engines use the serial number prefix and serial number range along with direct Builder File intervals (specific hour intervals).

3.3.2.3 Truck and Pleasure Craft Engines

The machine opportunity calculation logic will be applied to truck and pleasure craft engines because the repair interval is already defined in the BUILDER file. There will be an abbreviation of TRK or PC in the BUILDER file model name to distinguish models that are considered truck or pleasure craft. Utilization Rate is calculated in miles for truck and in hours for pleasure craft. Similar to machines, truck and pleasure craft engines use the serial number prefix and serial number range along with direct Builder File intervals (specific hour intervals).

3.3.2.4 Standby Engines

Description

Standby engines are used for backup power generation purposes. There are several applications for use such as emergency standby (e.g. equipment protecting people leaving a building), legally required standby (e.g. equipment aiding rescue workers and mandatory building functions), or optional standby systems (e.g. business functions). A good example for a customer who uses a standby engine would be hospitals in case of power outages. The purpose is to maintain clean, uninterrupted standby power. Standby engines are designed to run for only short periods of time and only when needed because of a power outage, etc.

Other than load management or quality power, Standby covers any application within any business where the engine powers an electric generator. The engine usage is sporadic and unplanned. Generally, Standby application denotes emergency power with varying load during electrical power failures or similar crisis. This application will not have any form of uninterrupted power supply (UPS) product or system installed.

A standby engine will generally not have any parts opportunity besides maintenance products. The dollar opportunity that standby engines generate for maintenance products cannot be expressed as an hourly unit of cost. This is due to the fact that routine maintenance must be performed on standby engines on a regularly scheduled basis, even though the engine may not have been used since the last maintenance event. With standby engines, the specific dollar opportunity for Cat parts is expressed as a unit of cost per day.

Fundamental differences between Standby and non-Standby engine builder files include:

- Standby engine builder files only contain fluids, belts, and PMs
- Non-standby engine builder files contain engine reconditions, sub-components, PMs, etc.

Therefore, from an opportunity perspective, the dealer (and customer) should think about what type of service will be required to maintain the engine over its life cycle.

In OLGA

The maintenance intervals in the standby BUILDER files are based on the number of elapsed calendar days, unlike typical BUILDER files which are based on how many hours the machine/engine runs. The 30, 60, 90, etc. day intervals in the standby BUILDER files are not affected by how many hours the unit runs. The standby engines use their in-service date to determine where it is in the maintenance cycle. Because of the unique process around standby engines, the utilization rate is calculated in days with a monthly utilization rate of 30 days (per month) and the SMU value is recorded as 0.

In OLGA, standby engines are identified by having an application code of "F" in the dealer's equipment data. OLGA will use standby engine BUILDER files for these serial numbers. There is an abbreviation of STBY in the BUILDER file model name. Similar to machines, standby engines use the serial number prefix and serial number range along with direct Builder File intervals (specific intervals).

If the application for an individual engine changes, for example a standby engine becomes a prime power engine, the dealer must manage the application code change in their ERP system. The related opportunities will be adjusted in the next monthly calculation.

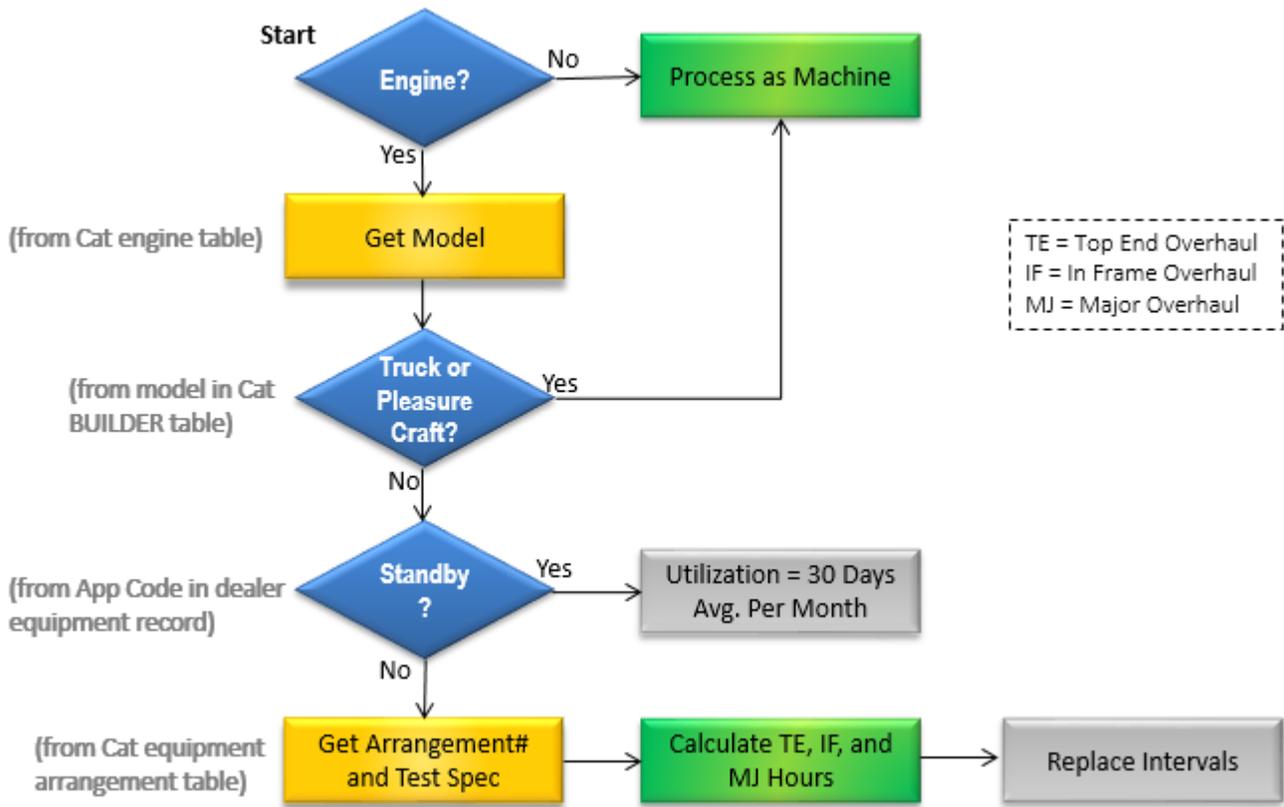


Best Practice: We recommend that dealers verify that all engines tagged with an application code of "F" are in fact standby engines and that this is what the customer is using them for.

3.3.2.5 Engine Opportunity Calculation Flow Chart

Each engine follows this basic logic to determine repair intervals before specific opportunity events can be generated. This is modeled after the Calculator application logic.

Note that only items classified with an “F” Standby Power application code will follow the Standby path for opportunity calculation. The other Standby codes (G – Emergency Standby & R – Mission Critical Standby) are processed using the regular engine process.



Example – Intervals:

Two serial numbers with the same prefix and the same arrangement number have different overhaul intervals (Component Code = 1000, Job Code = 019-Recon Before Failure). The only difference between these two serial numbers is the power rating – one is greater than the other.

Serial #	Arrangement #	Test Spec #	Power Rating	Job Code	Modifier Code	Next Interval
SBJ00924	266137	OK6997	1825 kW	019 - Recon Before Failure	TE - Top End	4,139
SBJ00150	266137	OK6996	2000 kW	019 - Recon Before Failure	TE - Top End	3,695

Engine calculation logic determines the correct overhaul intervals for each commercial engine using the serial number, arrangement number, test specification number, power rating, and load factor.

3.3.2.6 Engine Opportunity Intervals: Direct vs. Calculated

These examples show the difference in hour intervals between a machine and commercial engine Builder File. The commercial engine Builder Files contain the placeholders for Top End, In Frame & Major overhauls. These hours must be calculated.

Machine Builder File – Component Code 1000

Comp	Job	SMCS Description	First Interval	Next Interval
1000	007	ENGINE RECONDITION AFTER FAILURE	10000	10000
1000	010	ENGINE REMOVE & INSTALL	10000	10000
1000	020	ENGINE RECONDITION	10000	10000

Commercial Engine Builder File – Component Code 1000

Comp	Job	SMCS Description	First Interval	Next Interval
1000	019	ENGINE RECON BEFORE FAILURE TOP END	1	1
1000	019	ENGINE RECON BEFORE FAILURE IN FRAME/IN HULL/ON SITE	2	2
1000	019	ENGINE RECON BEFORE FAILURE MAJOR	3	3

“Typical” 3512 Petroleum Engine Builder File

A ‘typical’ 3512 petroleum engine will be used as an example to calculation the interval hours for Top End, In Frame and Major overhauls. BUILDER shows the serial number prefix of LLA as 3512C_PET. The suffix of PET identifies this prefix as a petroleum engine. The engine arrangement number is 2507623.

3512C_PET Caterpillar - LLA00001 - LLA00001														Price Hrs	Price Store	Labo Code	First Interval	Next Interval	Comp Qty	Std Hrs
S	RO Type	Has Parts	Shop Field	Comp	Job	Mod	Qty	Cab	Loc	Work App	Job Cond	Group No	SMCS Description	Price Hrs	Price Store	Labo Code	First Interval	Next Interval	Comp Qty	Std Hrs
P	C	Y	S	1000	019	IX						2507623	ENGINE RECON BEFORE FAILURE IN FRAME/IN HULL/ON SITE	71.40	**		2	2	1	71.40
P	C	Y	S	1000	019	MJ						2507623	ENGINE RECON BEFORE FAILURE MAJOR	167.90	**		3	3	1	167.90
P	C	Y	S	1000	019	TE						2507623	ENGINE RECON BEFORE FAILURE TOP END	67.90	**		1	1	1	67.90
P	S	N	S	1014	030							2507623	ENGINE & OUTPUT DRIVE AS TEST AFTER REPAIR	3.00	**	FLD	3500	3500	1	3.00
P	S	Y	S	1052	010		S					2506111	TURBOCHARGER REMOVE & INSTALL SET (ALL)	3.00	**	FLD	7500	7500	1	3.00
P	S	Y	S	1052	020		S					2506110	TURBOCHARGER RECONDITION SET (ALL)	2.00	**	FLD	15000	15000	1	2.00
P	S	Y	S	1355	510		S					9Y9171	THERMOSTAT/WATER TEMP REG REPLACE SET (ALL)	3.00	**	FLD	6000	6000	1	3.00
P	S	Y	S	1361	010							2W9726	WATER PUMP REMOVE & INSTALL	1.50	**	FLD	7500	7500	1	1.50
P	S	Y	S	1361	020							2128176	WATER PUMP RECONDITION	0.50	**	FLD	7500	7500	1	0.50
P	S	Y	S	1371	010							9Y8175	AUXILIARY/RAW WATER PUMP REMOVE & INSTALL	1.50	**	FLD	7500	7500	1	1.50
P	S	Y	S	1371	020							2128166	AUXILIARY/RAW WATER PUMP RECONDITION	0.50	**	FLD	7500	7500	1	0.50
P	S	N	S	1395	044							2507623	ENGINE COOLANT DRAIN & REFILL	1.00	**	FLD	3000	3000	1	1.00
P	S	N	S	1401	510		S					2507623	BATTERY REPLACE SET (ALL)	0.30	**	FLD	24000	24000	1	0.30
P	S	Y	S	1451	010							7C3371	AIR STARTING MOTOR REMOVE & INSTALL	1.00	**	FLD	9000	9000	1	1.00
P	S	Y	S	1451	020							7C3372	AIR STARTING MOTOR RECONDITION	1.00	**	FLD	9000	9000	1	1.00
P	C	Y	S	7501	540							2507623	PM 1 PERFORM	1.90	**		250	250	1	1.90
P	C	Y	S	7502	540							2507623	PM 2 PERFORM	2.40	**		500	500	1	2.40
P	C	Y	S	7503	540							2507623	PM 3 PERFORM	4.30	**		1000	1000	1	4.30
P	C	Y	S	7504	540							2507623	PM 4 PERFORM	10.45	**		2000	2000	1	10.45
P	C	Y	S	7515	540							2507623	PM 5 PERFORM	10.75	**		6000	6000	1	10.75

Engine Interval Calculation

The calculation for commercial engine interval calculation is based on fuel consumption to convert from liters to hours:

$$\text{Fuel Consumption (Liters)} \div \text{Fuel Rate} = \text{Interval (Hours)}$$

Fuel Consumption comes from the OMM while Fuel Rate comes from Engine Base Data and Engine Performance Table. Engine Repair Intervals are based on Fuel Consumption. Once an engine has reached that point, it is due for an Overhaul. How much fuel an engine uses per hour depends on how hard it is working. The engineers provided different fuel rates depending on how hard the engine is working.

Example – Fuel Consumption

For this model, the OMM specifies a Top End, Second Top End, and Major Overhauls. When Repair Standards created the Builder File, the Second Top End overhaul was “labeled” as an In Frame Overhaul and includes the Second Top End Overhaul job operations.

Maintenance Interval Schedule Service Hours and Fuel Consumption for 3512C Engines ⁽¹⁾			
Interval	Rated Up To 1300 RPM	Rated 1301 To 1600 RPM	Rated 1601 To 1800 RPM
250 Service Hours	33400 L (8800 US gal)	41000 L (10800 US gal)	48500 L (12800 US gal)
500 Service Hours	66800 L (17600 US gal)	82000 L (21600 US gal)	97000 L (25600 US gal)
1000 Service Hours	133500 L (35000 US gal)	164000 L (43200 US gal)	194000 L (51200 US gal)
2000 Service Hours	267000 L (70000 US gal)	328000 L (86400 US gal)	388000 L (102400 US gal)
3000 Service Hours	398000 L (105000 US gal)	491000 L (129600 US gal)	582000 L (153600 US gal)
6000 Service Hours	796000 L (210000 US gal)	982000 L (259200 US gal)	1164000 L (307200 US gal)
Top End Overhaul	11000 Service Hours	9000 Service Hours	7500 Service Hours
	1500000 L (395000 US gal)		
Second Top End Overhaul	22000 Service Hours	18000 Service Hours	15000 Service Hours
	3000000 L (790000 US gal)		
Major Overhaul	33000 Service Hours	27000 Service Hours	22500 Service Hours
	4500000 L (1185000 US gal)		

1,500,000 Liters

OMM interval schedules are estimates.

- OMM Text Provided Beneath the Chart Explains the Calculation Required to Determine Hours Using Fuel Rates & Load Factors
- Serial Number, Arrangement Number, Application, Power Rating & Load Factors Are All Needed to Determine the Hours

Example – Fuel Rate

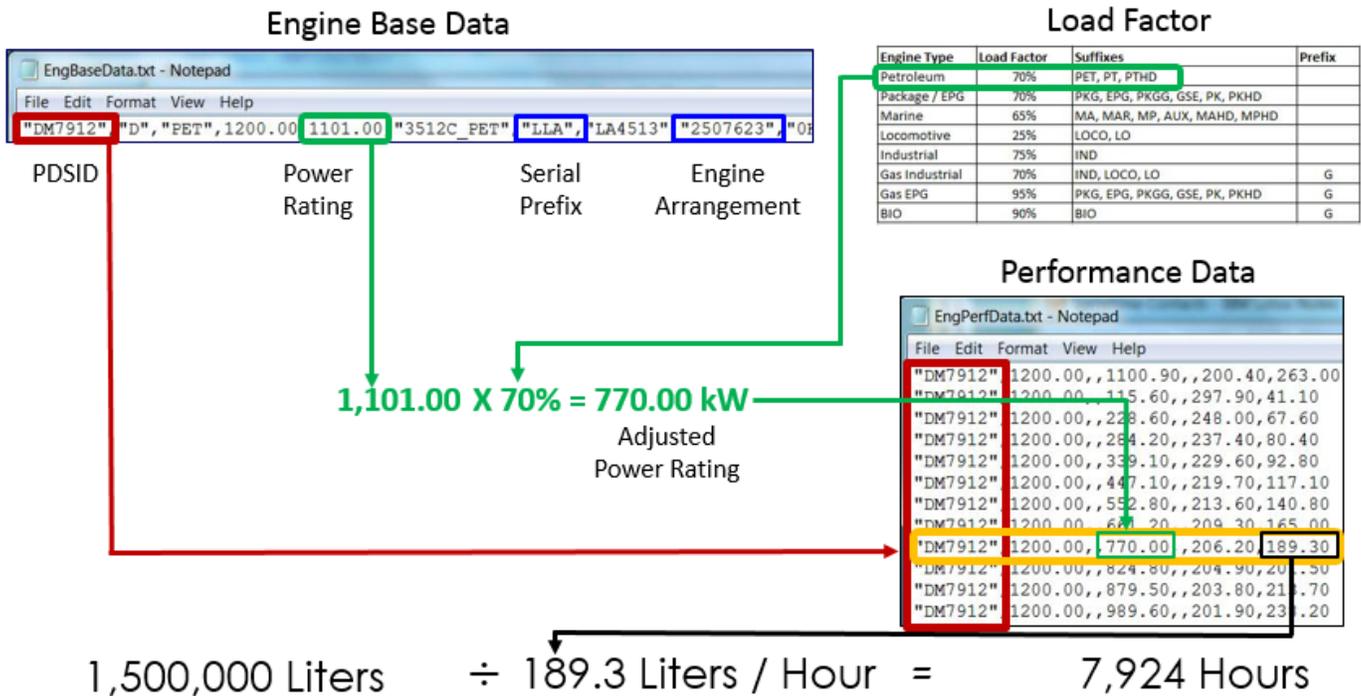
All Cat safe source data (Load Factors, Engine Base Data & Performance Data) are updated monthly and come from Cat safe sources – engineering data via Caterpillar Repair Standards Team (own Cat BUILDER files), Technical Marketing Information (TMI), Service Marketing Information (SMI), etc.

- The OLGA safe source data is updated between the 1st and 6th of each month. This is why our Dealer Data Calculation Runs do not begin until the 7th of each month.
- Power Rating * Load Factor = Adjusted Power (1101 x 70% = 770.00)
- Adjusted Power is used to select the correct fuel rate.
- PDSID identifies the test specification information from engineering and is used to find the power rating in order to calculate liters per hour.

- The power rating can also be referred to as horsepower.
- The average power of this engine should be 770 kilowatts over time. It may run at 100% at times and may idle for other periods of time, however, on average, the power rating is 770 kW.

Note: If the calculated adjusted power rating does not match the Performance Data, then OLGA will use the closest power rating to select a fuel rate.

For example: If the adjusted power rating is 525 kW, OLGA will use the rate for 552 kW resulting in a fuel rate of 140.80 Liters per Hour.



Example – Intervals (3512 Petroleum Engine Builder File with Calculated Intervals)

The Builder File has been mocked up to show what it would look like if the calculated hours were stored in the file.

- The Top End overhaul hours we calculated is 7924 (from Slide 16).
- The In Frame and Major overhauls are calculated the same way.
- The In Frame overhaul was at 3,000,000 Liters which equals 15858 hours.
- The Major overhaul was at 4,500,000 Liters which equals 23772 hours.

3512C_PET - Caterpillar - LLA00001 - LLA00001																				
S	RO Type	Has Parts	Shop Field	Comp	Job	Mod	Qty	Cab	Loc	Work App	Job Cond	Group No	SMCS Description	Price Hrs	Price Store	Labo Cod	First Interval	Next Interval	Qty	Std Hrs
P	C	Y	S	1000	019	IX						2507623	ENGINE RECON BEFORE FAILURE IN FRAME/IN HULL/ON SITE	71.40	**		15848	23772	1	71.40
P	C	Y	S	1000	019	MJ						2507623	ENGINE RECON BEFORE FAILURE MAJOR	167.90	**		23772	23772	1	167.90
P	C	Y	S	1000	019	TE						2507623	ENGINE RECON BEFORE FAILURE TOP END	67.90	**		7924	23772	1	67.90
P	S	N	S	1014	030							2507623	ENGINE & OUTPUT DRIVE AS TEST AFTER REPAIR	3.00	**	FLD	7924	7924	1	3.00
P	S	Y	S	1052	010	S						2506111	TURBOCHARGER REMOVE & INSTALL SET (ALL)	3.00	**	FLD	7924	7924	1	3.00
P	S	Y	S	1052	020	S						2506110	TURBOCHARGER RECONDITION SET (ALL)	2.00	**	FLD	7924	7924	1	2.00
P	S	Y	S	1355	510	S						9Y9171	THERMOSTAT/WATER TEMP REG REPLACE SET (ALL)	3.00	**	FLD	7924	7924	1	3.00
P	S	Y	S	1361	010							2W9726	WATER PUMP REMOVE & INSTALL	1.50	**	FLD	7924	7924	1	1.50
P	S	Y	S	1361	020							2128176	WATER PUMP RECONDITION	0.50	**	FLD	7924	7924	1	0.50
P	S	Y	S	1371	010							9Y8175	AUXILIARY/RAW WATER PUMP REMOVE & INSTALL	1.50	**	FLD	7924	7924	1	1.50
P	S	Y	S	1371	020							2128166	AUXILIARY/RAW WATER PUMP RECONDITION	0.50	**	FLD	7924	7924	1	0.50
P	S	N	S	1395	044							2507623	ENGINE COOLANT DRAIN & REFILL	1.00	**	FLD	7924	7924	1	1.00
P	S	N	S	1401	510	S						2507623	BATTERY REPLACE SET (ALL)	0.30	**	FLD	24000	24000	1	0.30
P	S	Y	S	1451	010							7C3371	AIR STARTING MOTOR REMOVE & INSTALL	1.00	**	FLD	7924	7924	1	1.00
P	S	Y	S	1451	020							7C3372	AIR STARTING MOTOR RECONDITION	1.00	**	FLD	7924	7924	1	1.00
P	C	Y	S	7501	540							2507623	PM 1 PERFORM	1.90	**		250	250	1	1.90
P	C	Y	S	7502	540							2507623	PM 2 PERFORM	2.40	**		500	500	1	2.40
P	C	Y	S	7503	540							2507623	PM 3 PERFORM	4.30	**		1000	1000	1	4.30
P	C	Y	S	7504	540							2507623	PM 4 PERFORM	10.45	**		2000	2000	1	10.45
P	C	Y	S	7515	540							2507623	PM 5 PERFORM	10.75	**		6000	6000	1	10.75

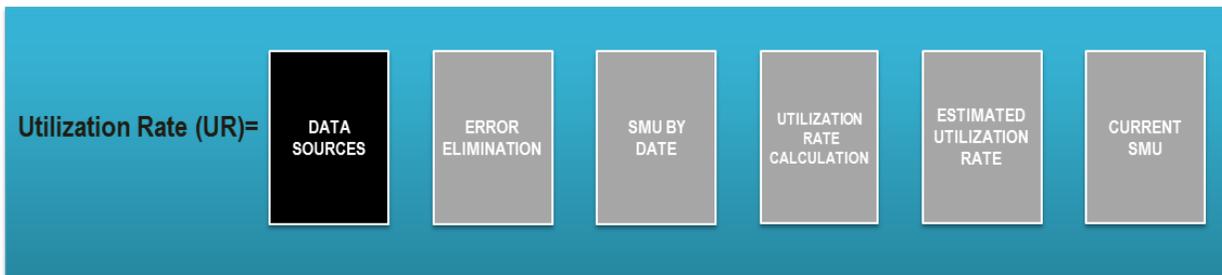
Note: OLGA also adjusts the other repair options for the serial number prefix so that they are in sync with the calculated overhaul hours. Exceptions are PMs, Batteries (1401), and Inlet/Exhaust Valve (1105), which are not adjusted.

Dealers who are uploading their own Builder Files have typically made changes to some repair option intervals, however, they have not adjusted other repair options to be in synch with the changed intervals.

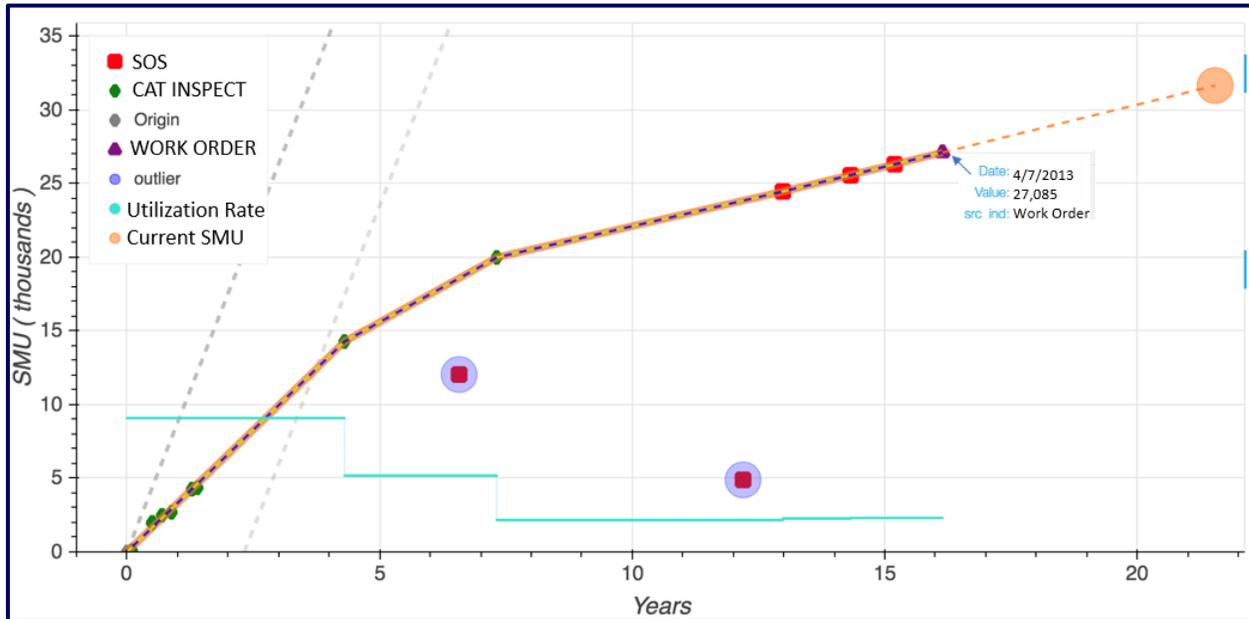
3.4 Utilization Rate Logic

The following steps are taken to calculate the most up-to-date SMU and the Utilization Rate for each serial number:

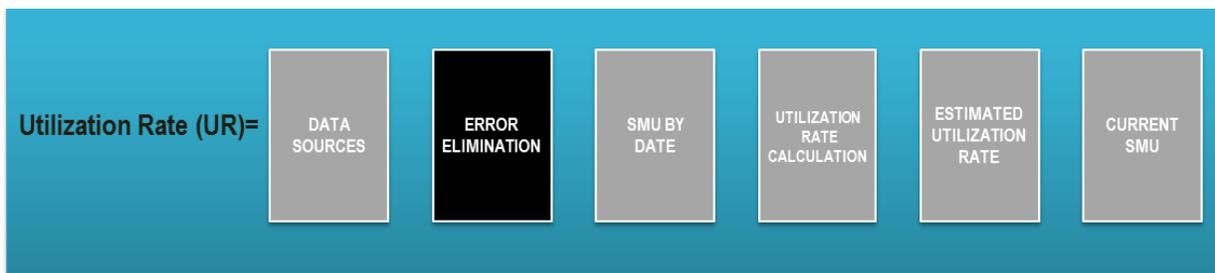
1) Caterpillar identifies data points for each serial number.



- a. The utilization rate takes into account SMU's across its entire life and implements a time series forecast called trend filtering. This identifies outlying SMU points as well as meter resets and duplicate data points (and other data defects) to identify a primary trend. After outlier determination and trend recognition, the utilization rate is calculated and an SMU is forecasted as of the current date.
- b. All data points must include a valid serial number, date, and SMU.
 - i. Note that OLGA is only using data points that are currently sent to Caterpillar.
- c. Data Points include:
 - i. SIMS – Equipment List (Sales/Delivery Date)
 - ii. SIMS – Events (Failures) and Claims (Warranty)
 - iii. Product Link®, Vision Link, & Cat Japan Product Link
 - iv. CTSpro
 - v. ECM – Truck Engines
 - vi. S•O•SSM Services – Cat Oil Sampling
 - vii. Dealer Work Orders (Original Open Date)
 - viii. Caterpillar Inspect
 - ix. VIMS, Minestar reported through VIMS, and Info Trak
 1. This only applies when the dealer is sending the data to Caterpillar.
 - x. Dealer Equipment Record (ex: DBS Prime Product Record)
- d. For this example, consider that the serial number 4TR12345 has data points from S•O•SSM Services, Work Orders and Cat Inspect.
 - i. Consider that we are doing the utilization rate calculation for the OLGA data calculations run in March (for data up until the 28th of February).
 - ii. Caterpillar sources all of the data points for said serial number

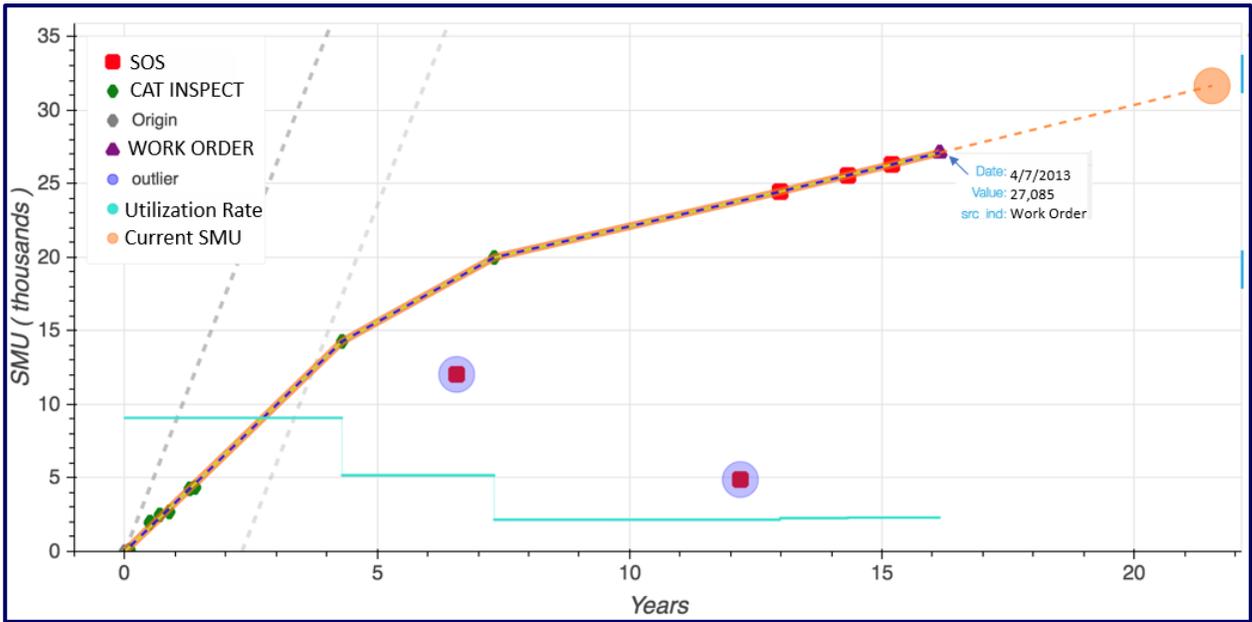


2) Caterpillar removes any data points with errors.

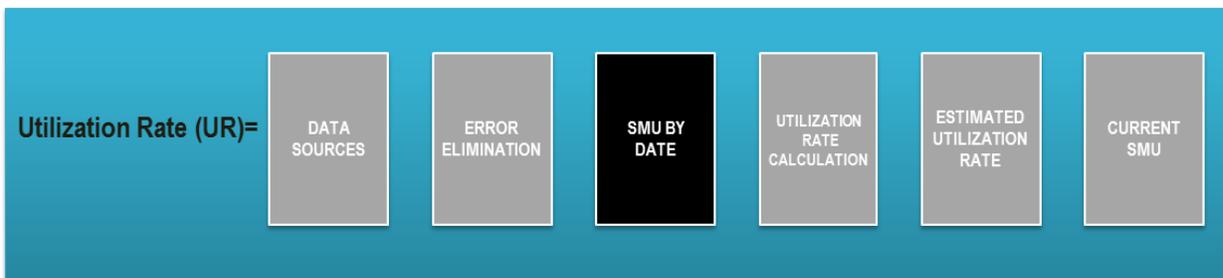


- a. Any SMU points identified as outliers will be recognized (see blue circles in visualization above) and will be ignored in forming the primary trend and utilization rate calculation.
- b. Any data integrity issues will be removed prior to processing.
 - i. No hours or date (Null)
 - ii. Repairs that occurred prior to 1970 are not included
 - iii. Usage greater than 24 hours per day
 - iv. Manual Hours (9999, 99999, 9999999, etc.)
 - v. Out of sequence data
 - vi. No Sales or Delivery Date in SIMS (Needed for validation)
 - vii. Miles that are too high
 - 1. Based on the in service date and the date of the repair, OLGA gets the age of the machine at the time of repair. OLGA multiplies the age of the machine at repair by 65mph by 24 hours to get an absolute maximum mileage for the machine at that repair. Any miles greater than this number is incorrect.

- 2. Maximum miles for the machine = 65 mph * 24 hours * (Repair date – Inservice date)
- viii. Hours that are too high
 - 1. Based on the in service date and the date of the repair, OLGA gets the age of the machine at the time of repair. OLGA multiplies the age of the machine at repair by 24 hours by 365 days to get an absolute maximum hours for the machine at that repair. Any SMU greater than this number is incorrect.
 - 2. Maximum hours for the machine = 365 days * 24 hours * (Repair date – Inservice date)
- c. In this case, the work order SOS samples (in blue circles) are clearly out of sequence and therefore are not being considered in the overall trend.



3) Caterpillar will only use one data point per day in it's Utilization Rate calculation.



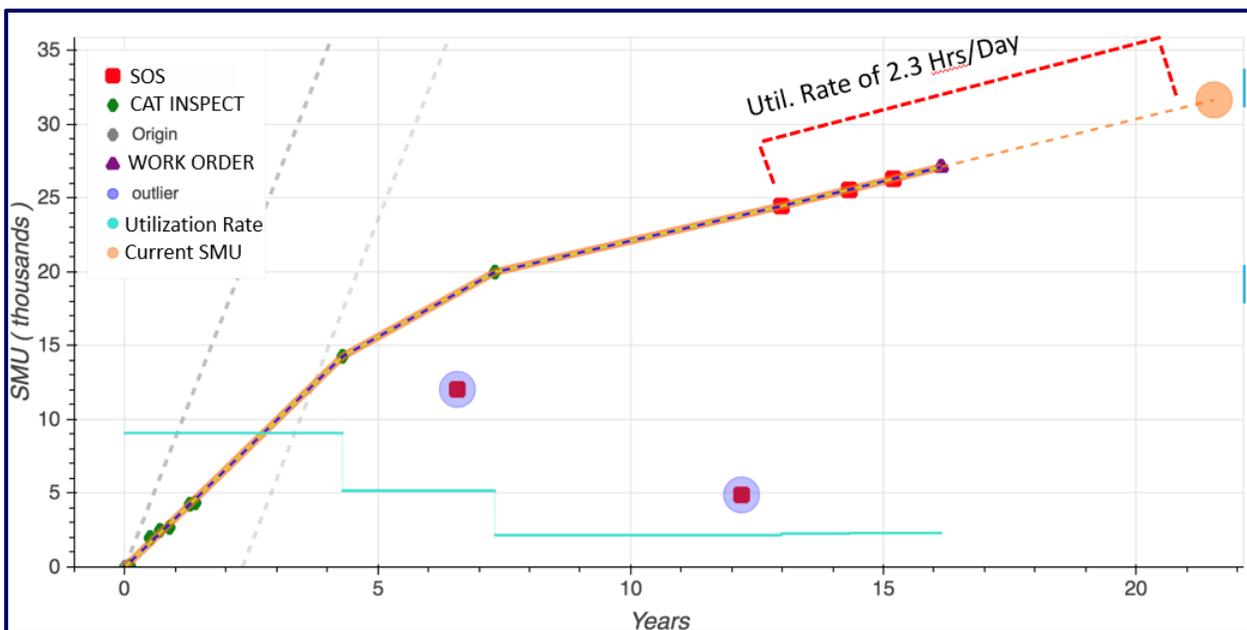
- a. If multiple SMU points are received on the same day, OLGA will take the highest value SMU point.

- b. When there are multiple data sources with the same SMU in a 250 day period, other than any of our telematics sources, then OLGA will only use the first occurrence of that SMU value in order to prevent over parking of equipment

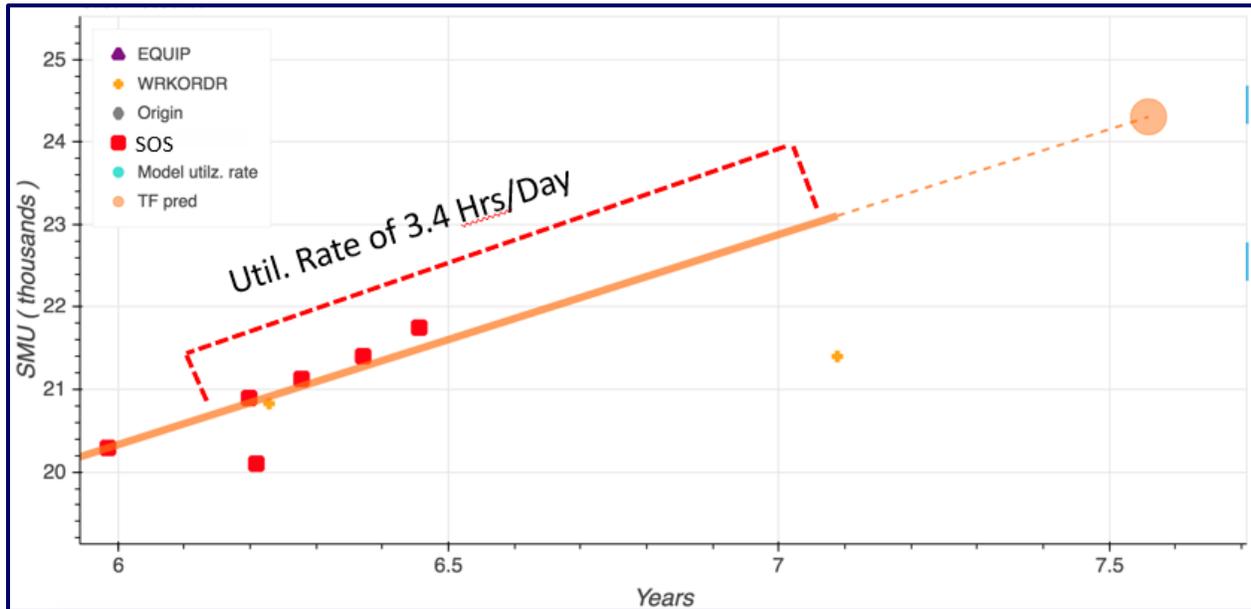
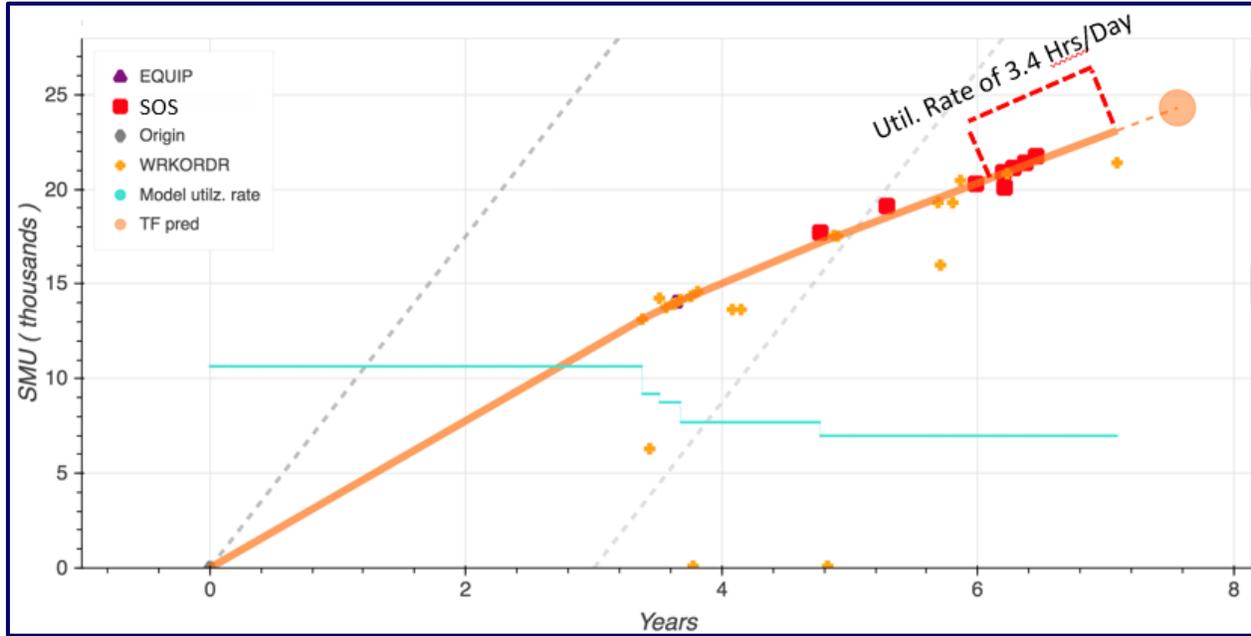
4) Caterpillar calculates the Utilization Rate based on the most recent trend identified from the trend filtering process and outlier elimination.



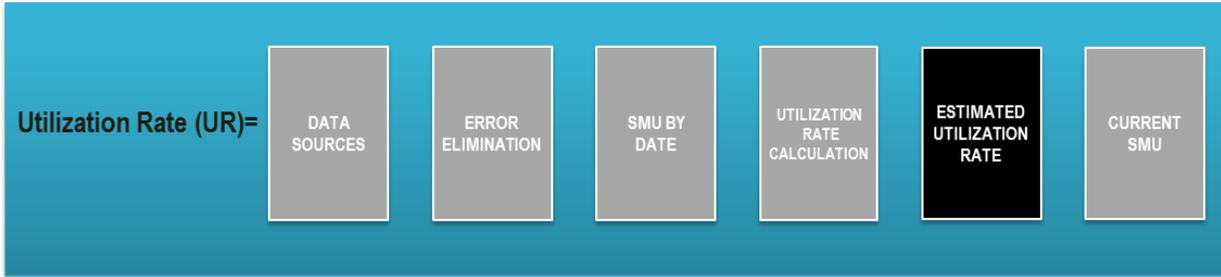
- a. In the example below, the Utilization Rate process has identified a trend through the last four data points (highlighted by the blue and yellow dashed line) that indicates a rate of 2.3 hours per day.



- 5) In this example, we can see how the trend line may not run through all of the SMU points provided. This can be explained by potential lags in SMU reporting that has caused dates to be misaligned to when they were actually recorded.



6) Caterpillar calculates a monthly utilization rate for every serial number.



a. Serial Number Specific Utilization Rate

- i. The daily utilization rate is converted to a monthly utilization rate by multiplying by 30 days.
- ii. The monthly utilization rate is used in the OLGA opportunity calculation.

$$7.86 \text{ (daily rate)} * 30 \text{ days} = 235.58 \text{ hours per month}$$

b. Estimated Utilization Rate

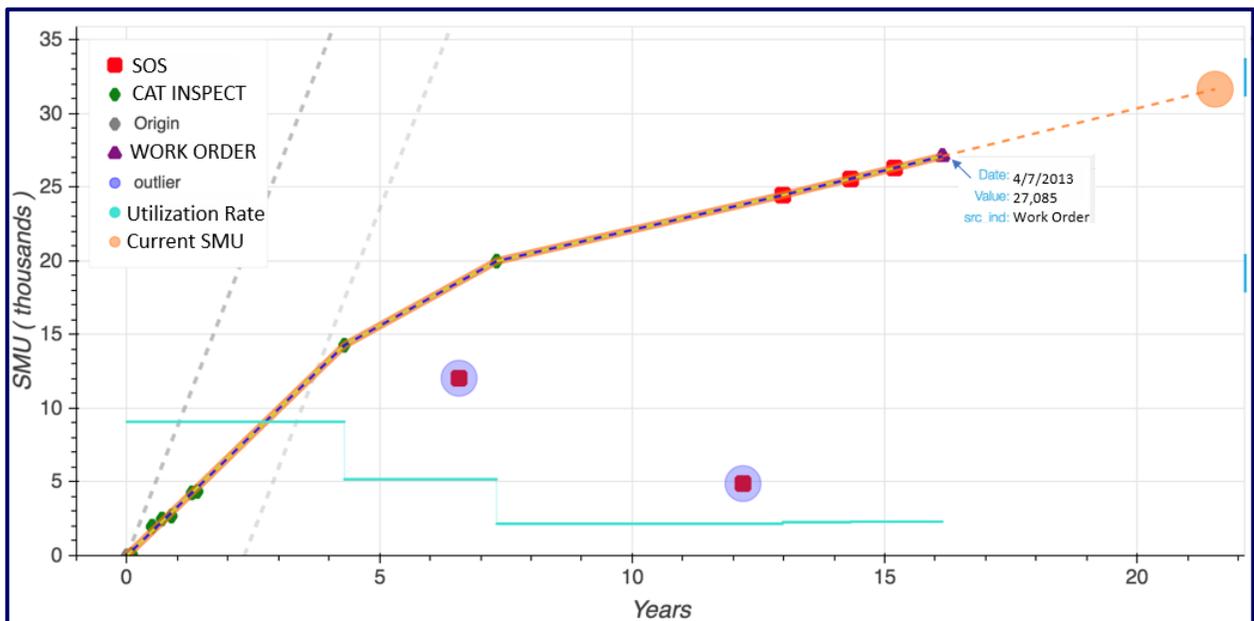
- i. If a serial number does not have 3 valid data points within the last 10 years, then an estimated Utilization Rate will be calculated based on a supervised machine learning algorithm that utilizes the trend filter result from similar machines with sufficient amount of data. In other words we take an average of similar machines in a similar industry in a similar region.

7) Caterpillar Calculates a forecasted SMU for all serial number as of the current date



- a. The monthly OLGA data processing for the Dealer is scheduled for the 8th calendar day of each month.

- i. Consider for this example that the Dealer’s OLGA data is being processed on July 8th, for data up until the 30th of June.
- b. Caterpillar updates the SMU to the estimated SMU on the date the OLGA calculations are processed based on the last recorded SMU and the Utilization Rate.
- c. In this example, the SMU will be updated to an estimate for June 30th based on the last recorded SMU value of 27,085 from the work order on April 7th, 2013.
- d. The result is that OLGA will display an smu value of 32,317 as of June 30th, 2019 with a utilization of 69 hours per month. I.e. $(2.3 \text{ hours per day} * (6/30/2019 - 4/7/2013)) + 27,085 = 32,317$.



3.4.1 Not Enough Data Points/Estimated Utilization Rate

If a serial number does not have at least three data points within the past 10 years, an average Utilization Rate (UR) will be calculated using a random forest machine learning algorithm that identifies similar machines or engines in similar industries and similar geographic regions (or dealer territories).

3.4.1.1 Parking a Serial Number

Parking is **not** meant to be for short term time period such as maintenance, weather, seasonality, operator/job site, vacation, etc.

Parking is meant for machines that are truly unused for an extended period of time or for an unknown period of time. For example, if a construction site has shut down or the machine belongs to a customer who is now out of business.

3.4.1.1.1 *Automatically Parking a Serial Number*

This is also known as “natural” parking. OLGA defines parked as any machine that has a calculated utilization rate less than 5 hours per month (.1666 hours per day). OLGA can calculate a very low utilization rate through it’s normal utilization rate calculation process. If SMU points indicate that the machine is running less than 5 hours per month it will be flagged in the OLGA web app as “Naturally Parked” with whatever rate was calculated, for example 4 hours per month. If the most recent data points received have the same SMU (indicating no accumulating hours) over 250 days the calculation will assume a monthly rate of 0.03. If the serial number is believed to be parked prior to this 250 day requirement the serial number can be parked through the manual parking process described below.

3.4.1.1.2 *Avoiding Accidentally Parking a Serial Number*

To avoid accidental parking, when there are multiple data sources with the same SMU in a 250 day period, other than any of our telematics sources, then OLGA will only use the first occurrence of that SMU value in order to prevent over parking of equipment (see example below).

Example:

There is a “Red” SOS sample on 1 January 2016. The customer shuts down the machine and takes it in for service on 31 January 2016. The dealer updates the SMU value in the equipment record on 15 February 2016. Without this processing step, OLGA would accidentally park this machine for what was essentially 1 event, a work order. All opportunity would be on hold until another data point was received, perhaps a year or more into the future.

Source	Date	SMU
SOS – Red Sample	1 January 2016	12,000
Work Order	31 January 2016	12,000
Equipment Record	15 February 2016	12,000

3.4.1.2.1 Manually Parking a Serial Number

A machine can be parked manually by the dealer. This option is needed because a parked machine may not receive 3 SMU points through normal operations even though it is not reporting hours.

3.4.1.2 Edit Parked Equipment Indicator in ERP System

The dealer's first manual option is to edit their Parked Indicator in their ERP system as "Parked" using the appropriate value. This value may vary by ERP system and/or by dealer business process. The calculation will use the Parked indicator to calculate a daily rate of .001, which parks the machine.

The CDDW equipment interface has an attribute for "ACTIVITY_IND" (activity indicator). The codes used in this field are:

A = Active (default value)

P = Parked

O = Other

S = Scrapped / Used

ETL Tool – Mapping Example:

The dealer's Business System may not have an explicit "Activity Indicator" field. In these cases, the dealer may need to change their mapping to reflect the process that their dealership uses to track Parked units through their Business System. The dealer's system may not have a single field that is used to determine Parked equipment, and therefore the correct mapping should be determined based on their unique data practices.

When determining what kind of mapping is needed, first answer the question: *How would I electronically pull a list of Parked equipment?* From the answer to this question, the dealer can set up their mapping in the ETL tool by following the logic through their Business System.

Example of mapping:

If the dealer is using annual hours to determine parked equipment, then this could be used to define the *Activity Indicator* mapping. Below is a non-DBS example.

```
CASE WHEN  
TRIM(ANNUAL HOURS) <> '0' and  
TRIM(ANNUAL HOURS) < '10' THEN 'P'  
ELSE 'A' END
```

This mapping states that there is a location within the Dealer's system that contains the Annual Hours information for the dealership. *Note:* The actual defined location may vary by system, file, and field.

The first TRIM line removes all leading zeroes as they are not used. The second TRIM line states that in the Annual Hours information, for all units with LESS THAN 10 HOURS of activity, mark the unit as Parked ("P"). For all other units, set to Active ("A").

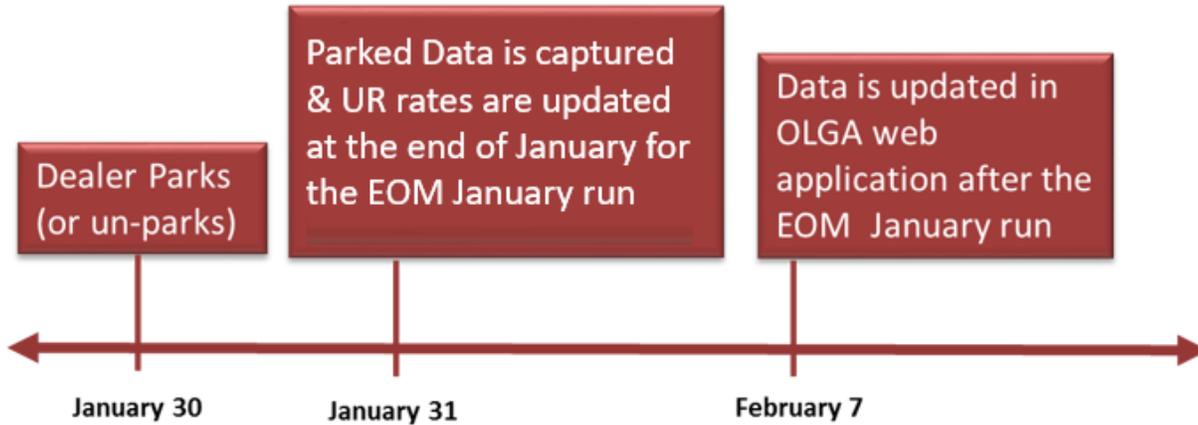
If the annual hours have not been adjusted by the dealer then the default annual hours is 0, which is why we have the following statement to avoid parking equipment by default:

```
TRIM(ANNUAL HOURS) <> '0'
```

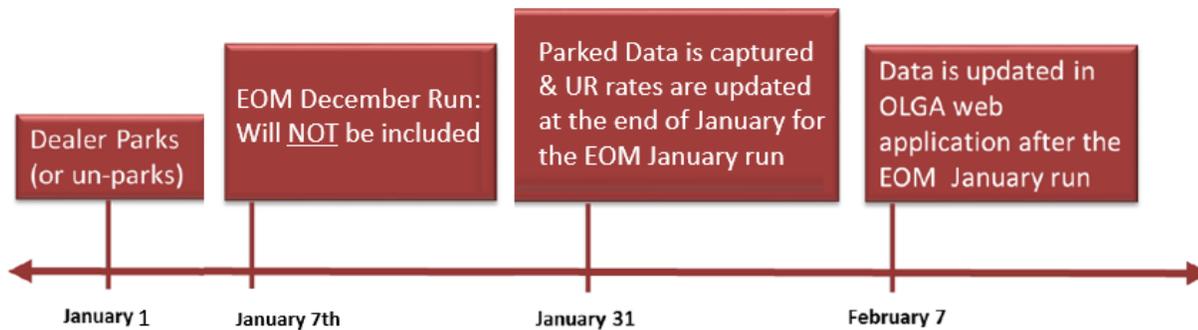
3.4.1.2.2 Timeline Effect of Parking in OLGA

Any serial number parked or un-parked in a given month will be reflected in that month's EOM OLGA run. For example, any serial number that is parked or un-parked in June be reflected in the EOM June run. Even if something is Parked January 6th before the EOM December run on January 7th it will not be reflected in the EOM December run. The machine was officially parked in January therefore it will only be reflected in the EOM January OLGA run.

Example 1



Example 2



3.4.2 Manually Entering SMU Points into the Equipment Record

The Caterpillar Digital Data Warehouse (CDDW) is only able to capture a single equipment record at a time and does not capture every historical record currently sitting in the dealer’s business system. While the CDDW does store historical records, it is only able to store captured records. This means that if a dealer wants to manually enter multiple Service Meter Unit (SMU) units, then only one SMU point can be entered per serial number into the Equipment Record before the record is submitted to the CDDW. The dealer may want to enter a manual SMU point to the Equipment Record to accommodate un-parking a piece of equipment or to update the SMU or Utilization Rate data.

When all three SMU points are entered simultaneously and then submitted to the CDDW together then the CDDW is only able to capture the latest data point (in the below example, the SMU point on 3/1/2017 with 12,590 hours). The other two points in the example will be missed and not included in the Utilization Rate calculation.

3.4.2.1 Example for Updating Utilization Rate Data or SMU

A dealer may choose to enter historically valid SMU points in order to update the Utilization Rate or SMU value. This example shows how you would enter three valid historical SMU records. However, the process would be the same any time a dealer wants to add two or more SMU points.

1. Enter the KNOWN SMU value of the equipment
 - a. Date: 1/1/2017
 - b. SMU: 12,455 hours
2. The Equipment record needs to be submitted to the CDDW
3. Enter the KNOWN parked SMU value of the equipment
 - a. Date: 2/1/2017
 - b. SMU: 12,510 hours
4. The Equipment record needs to be submitted to the CDDW
5. Enter the KNOWN parked SMU value of the equipment
 - a. Date: 3/1/2017
 - b. SMU: 12,590 hours
6. The Equipment record needs to be submitted to the CDDW

The CDDW will now contain all three historical SMU records:

Date	1/1/2017	2/1/2017	3/1/2017
SMU Value	12,455	12,510	12,590

Assuming there are no errant SMU points, then the new Utilization Rate for this machine will calculate as 1.5 hours a day (135 hours / 90 days = 1.5) with a current SMU of 12,590.

3.4.3 Understanding the Utilization Rate Visualization

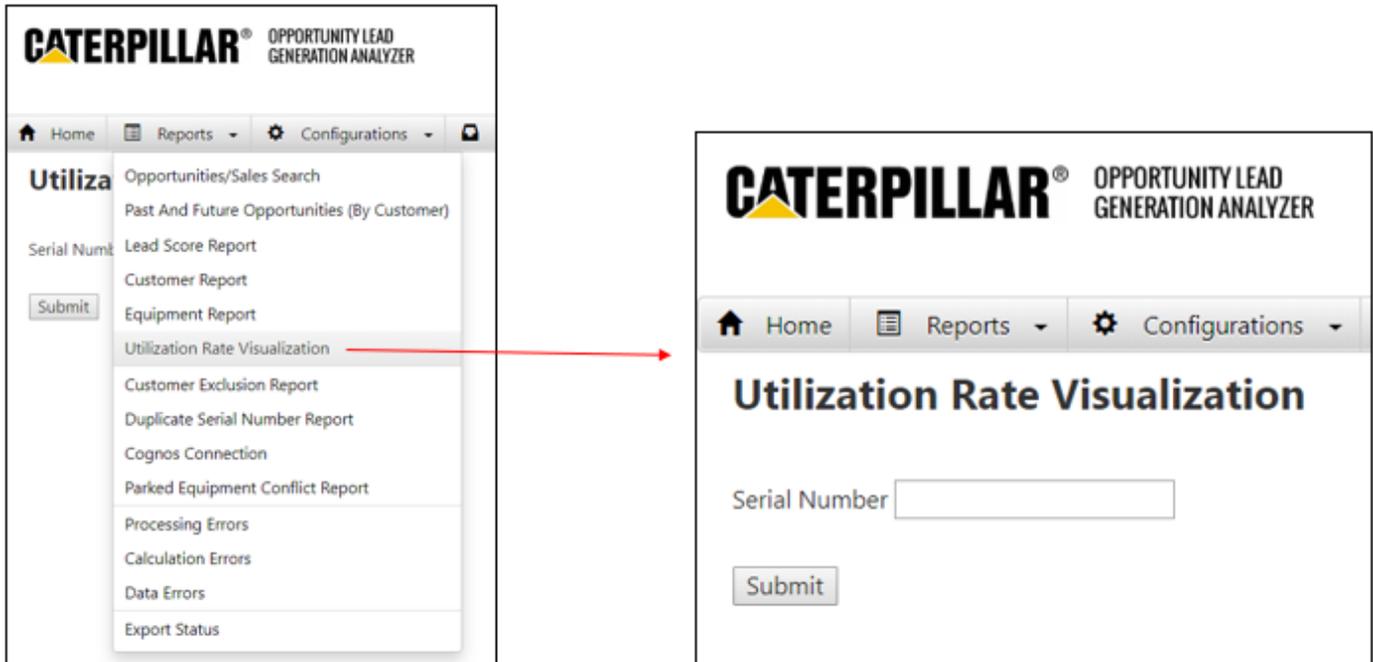
3.4.3.1 The Basics

Dealers will be able to access the utilization visualizations through the Equipment Report and now both the Utilization Rate Visualization located on the Reports tab as well as the Parked Conflict Report.

In the Equipment Report and Parked Conflict Report each serial number will have a hyperlink on the SMU value that will open the Utilization Rate Visualization in a new tab.

Visualizations are only available for serial numbers that utilize the Actual Utilization Rate method, including Naturally Parked, or are Dealer Parked that would have otherwise used the Actual method.

If granted access to view by their OLGA Admin, users will be able to go directly to the Utilization Rate Visualization page and type a serial number directly into the search bar



The Equipment Report

Equipment Report

Users with access to visualizations will also find a blue hyperlink in the SMU column of the Equipment Report. The hyperlinks will bring up a new tab that displays the visualizations if available for that serial number.

Equipment Report

▼ Filters

- ▶ Customer
- ▶ Product
- ▶ Opportunity/Sales Event

Generate Report | Export to Excel

Page : 1 | 2 3 4 5 6 7 8 9 10 11 | Total Record(s) : 56,310 | Show 100 Records |

Serial Number	Product Family	Model	Customer Name	Customer Number	Division	Industry Vertical	Industry	Sales Rep Number	Sales Rep Name	Sales Rep Type	Territory Indicator	Current Equipment	Included/ Excluded	Reason For Exclusion	Current Activity Indicator	Parked Status	Parked SMU Date	Parking Dealer Region	Monthly Utilization	SMU Type	Utilization Type	SMU	Last Reported SMU	Last Reported SMU Date
4420013	WHEEL LOADERS	994F	Customer 003051	003051	C	UNK					I - In Territory	YES		A - Active					517	Hour	Actual	28,026	33,761	12/03/2018
44200173	WHEEL LOADERS	994F	Customer 003051	003051	C	UNK					I - In Territory	YES		A - Active					572	Hour	Actual	58,897	58,249	11/16/2018
9YF00029	WHEEL LOADERS	994	Customer 003051	003051		UNK					I - In Territory	YES		A - Active					61	Hour	Actual	41,601	34,950	01/05/2010
44200306	WHEEL LOADERS	994F	Customer 000001A	000001A	C	UNK					I - In Territory	YES		A - Active					398	Hour	Actual	29,814	28,522	11/28/2018
APX00192	OFF HIGHWAY TRUCKS	785C	Customer 003051	003051	C	UNK					X - Unknown	YES		A - Active					623	Hour	Actual	127,140	124,835	08/31/2018
9TR00366	TRACK TYPE TRACTORS	D11R	Customer 003051	003051	C	UNK					I - In Territory	YES		A - Active					528	Hour	Actual	100,001	43,599	03/11/2010

The Parked Conflict Report

Parked Conflict Report

CATERPILLAR OPPORTUNITY LEAD GENERATION ANALYZER

Home Reports Configurations Administration Help

Name: Admin Hester
Current Language: English

Dealer: Pricing Strategy: Suggested Consumer List
End Of Month: Mar 2019
Last Run Date: 04/23/2019

Update Alerts Logout

Parked Equipment Conflict Report

Filters

Customer: S/N Prefix: Serial Number: Duplicate Serial Number: Territory Dealer Code:

Page: 1 Total Records: 142 Show 100 Records

Serial Number	Model	Territory Dealer Code	Customer Number	Customer Name	Parked SMU Date	Current SMU	Current SMU Date	Last Reported SMU	Last Reported SMU Date	Last Invoice Date	Total Sales Value (Previous 12 Months)	Duplicate Serial Number
Z8W	789C				08/01/2017	49,939	03/31/2019	40,451	03/11/2019	12/07/2018	330,773	No
APW	789C				08/01/2017	37,369	03/31/2019	37,369	03/09/2019	03/09/2019	221,703	No
APW	789C				08/01/2017	36,151	03/31/2019	18,572	02/12/2019	03/28/2019	213,374	No
Z8W	789C				08/01/2017	39,309	03/31/2019	37,968	02/21/2019	03/05/2019	113,852	No
RUD	D10T				10/01/2016	32,570	03/31/2019	32,565	03/07/2019	02/14/2019	107,588	Yes
TEC	3998				01/01/2018	69,933	03/31/2019	14,218	10/15/2018	11/01/2018	75,227	Yes
AOC	777D				01/01/2019	29,182	03/31/2019	29,272	03/10/2019	08/12/2018	70,710	No
ATH	789C				08/01/2017	22,209	03/31/2019	22,478	02/04/2019	12/19/2018	66,835	No
APW	789C				08/01/2017	36,641	03/31/2019	35,966	03/05/2019	11/22/2018	66,494	No
ATH	799C				08/01/2017	30,448	03/31/2019	30,279	02/16/2019	01/17/2019	41,484	No
Z8W	789C				10/01/2016	29,154	03/31/2019	29,187	03/26/2019	08/19/2018	27,674	No
RUD	D10T				06/01/2017	17,271	03/31/2019	17,501	02/16/2019	12/12/2018	23,249	No
FDB	793D				10/01/2017	61,724	03/31/2019	61,070	03/19/2019	02/13/2019	21,503	No
ATH	799C				08/01/2017	48,411	03/31/2019	48,402	03/19/2019	02/18/2019	20,532	No
Z8W	789C				08/01/2017	39,930	03/31/2019	38,804	03/14/2019	01/31/2019	18,259	No

Users with access to visualizations will also find a blue hyperlink in the Current SMU column of the Parked Conflict Report. The hyperlinks will bring up a new tab that displays the visualizations for that serial number.

The X Axis:

This represents time in years but essentially shows the age of the piece of equipment. Time starts at point 0 which is based on the Inservice Date which is generally the Delivery or Sale Date recorded on the SCOR card provided to SIMS.

The Y Axis:

The left side Y axis for SMU Points identifies the SMU Value of that point in thousands.

The right side Y axis identifies the monthly utilization rate and corresponds to the Blue Line.

The Key:

This provides information regarding the points on the graph, specifically identifying the SMU sources, Current SMU, and Utilization Rate.

The Orange Line:

Indicates the SMU point trend line identified by the algorithm. This trend line is based on the trend filtering methodology that attempts to create a line through as many of the provided SMU points as possible while minimizing SMU drops and avoiding violating specific rules like calculating a rate over 24 hours per day.

This orange line can also be considered the utilization rate however the blue line provides a better understanding of the utilization rate.

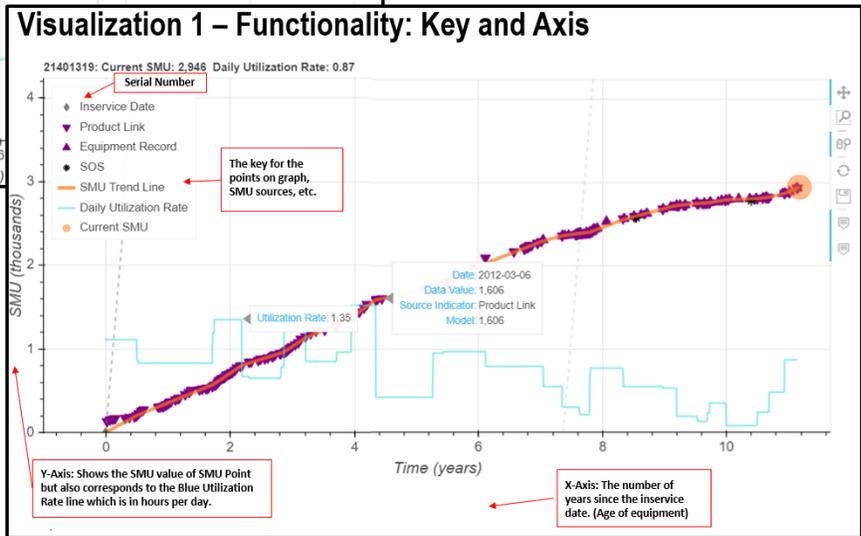
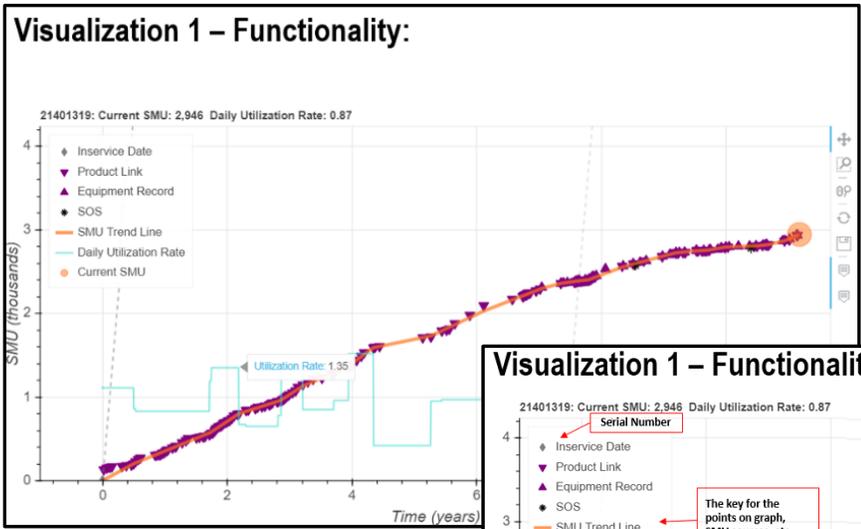
The Orange Circle:

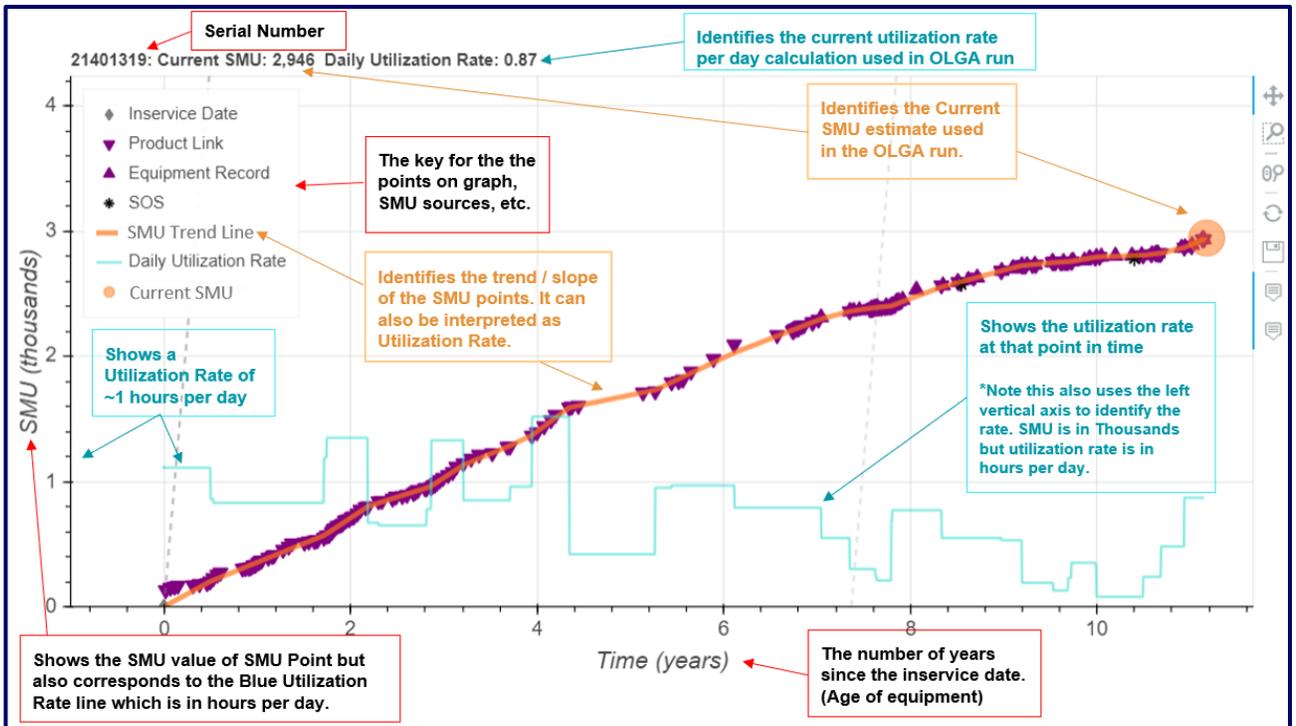
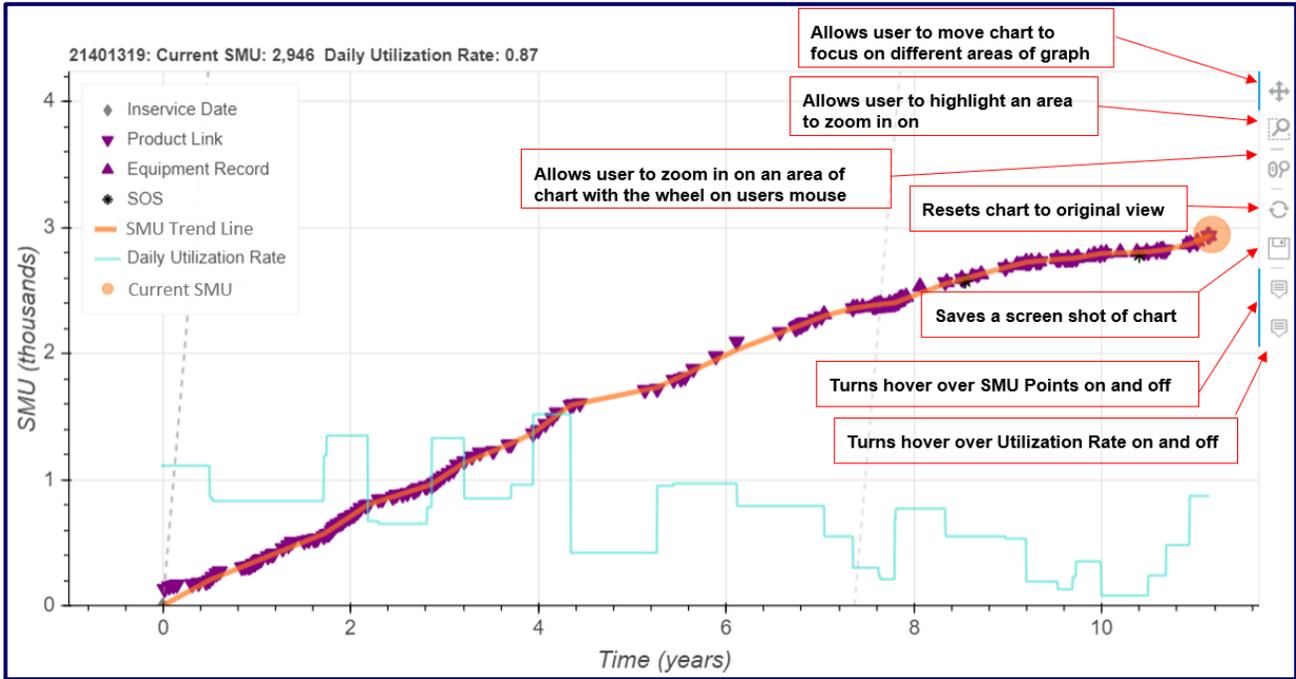
Indicates the estimated Current SMU that is used in the current OLGA run.

The Blue Line:

Indicates the utilization rate calculated at the given point in time based on the SMU points received up until that date.

Note: The left-hand Y axis represents both the SMU value for each SMU point (in thousands) as well as the utilization rate in hours per day.

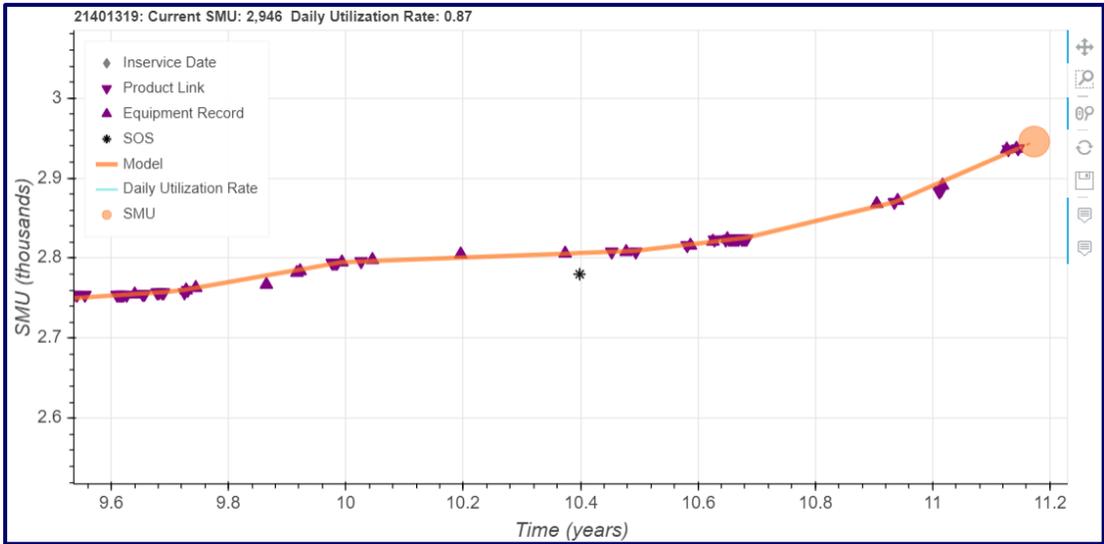




3.4.3.2 Tool Features and Functionality

The visualization tool has some options on the right hand side that allow you to interact with the graph including moving and zooming in to focus on specific areas, save a screen shot, as well as toggling of hover over functionality.

A zoomed in view of the latest SMU points.



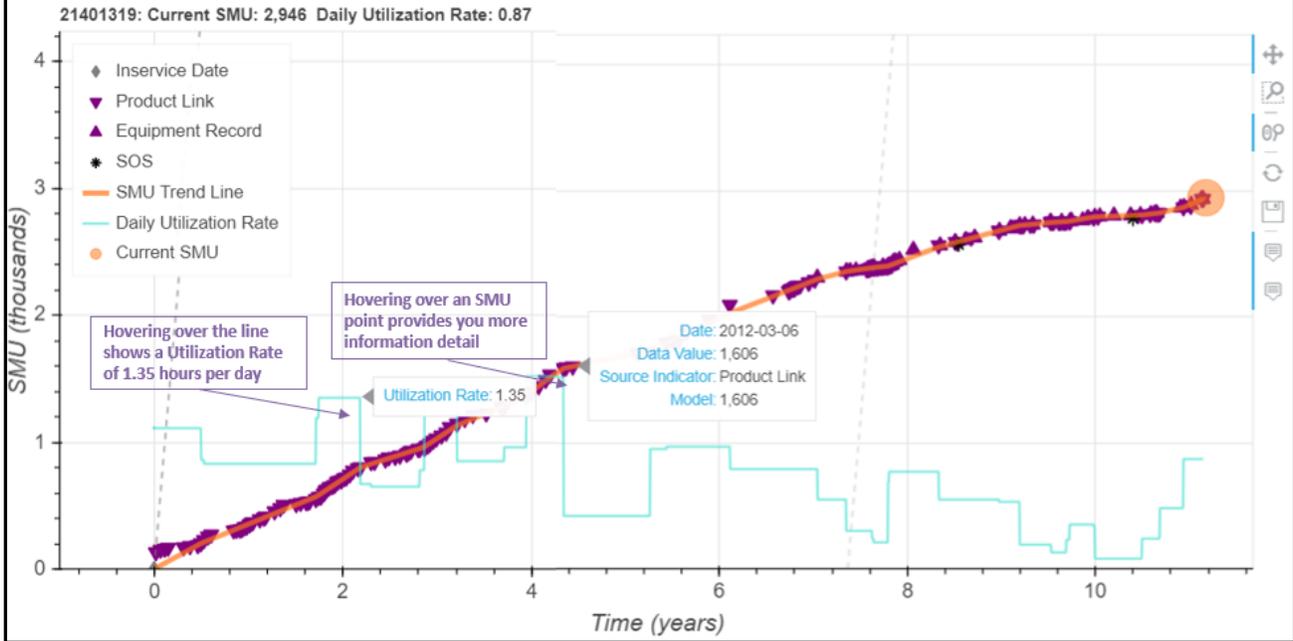
3.4.3.3 Hover Over

Hovering over SMU Point:

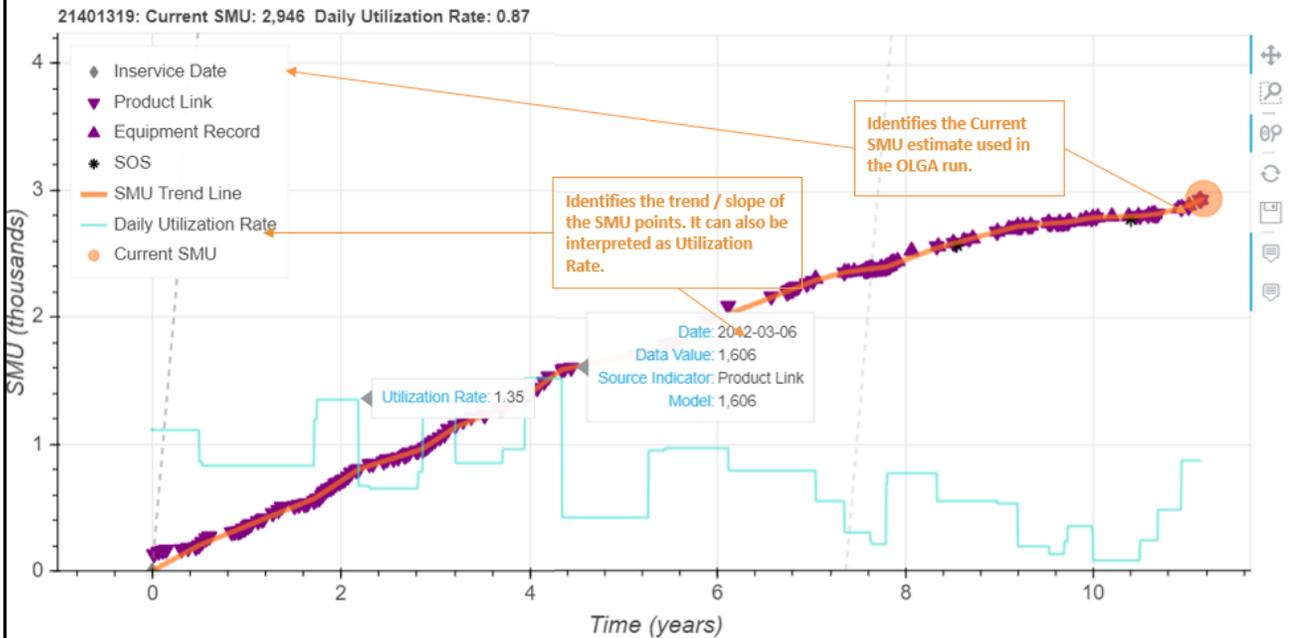
Hover your mouse over an SMU point to get more information about the point like Date, Actual Value (Data Value) of the SMU point, source, and the Adjusted SMU.

For an SMU point that does not fit perfectly on the Orange Trend Line the Adjusted SMU is the algorithm's estimate for what the correct value for that SMU point should be based on the date of the SMU Point

Visualization 1 – Functionality: Hover Over



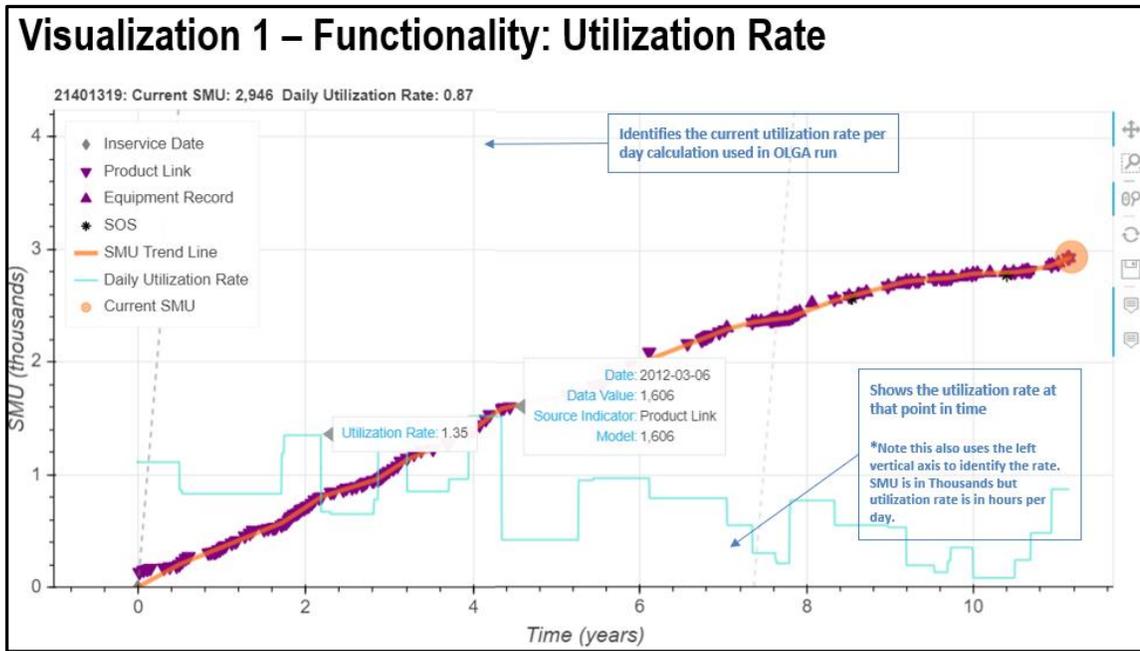
Visualization 1 – Functionality: SMU Values



Hovering over the Utilization Rate (Blue Line):

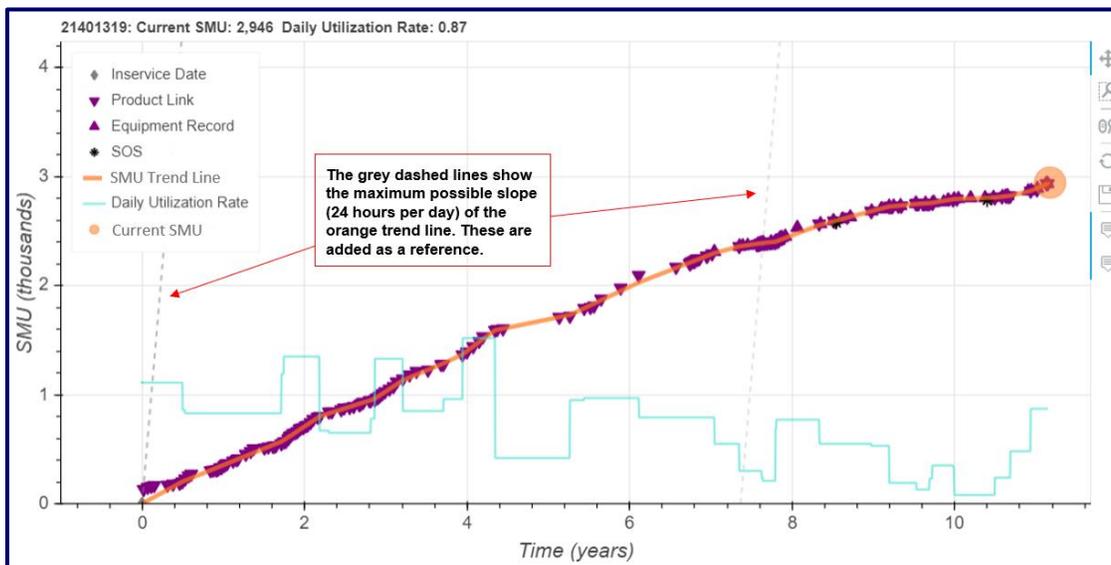
Hover your mouse over the Blue Utilization Rate Line to see the utilization rate that was calculated at that point in time based on the SMU values received up until that date.

Visualization 1 – Functionality: Utilization Rate



The Grey Dashed Reference Lines:

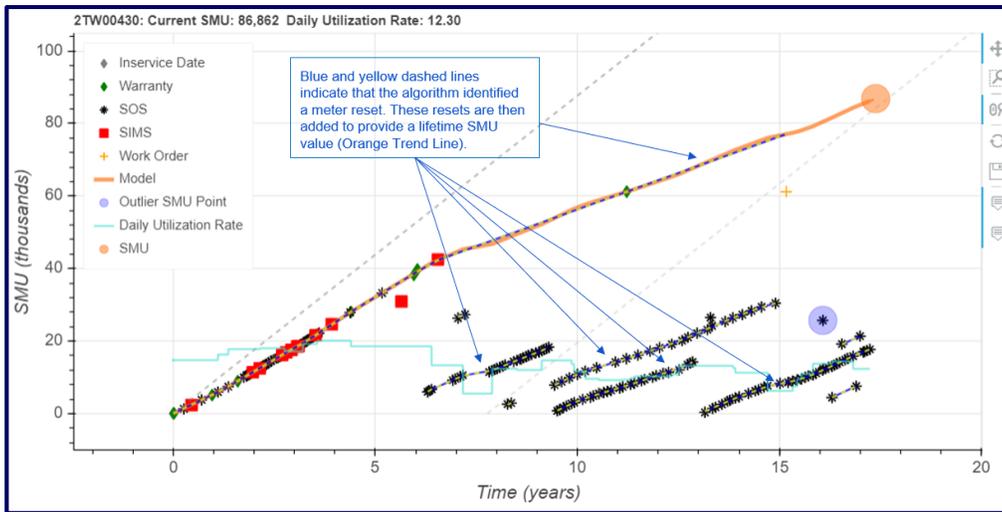
The grey dashed lines are provided as a reference point. The slopes of these lines show a maximum utilization rate of 24 hours per day. You can compare the slope of the Orange Trend Line to that of the grey dashed line to get a reference for the utilization rate generated by the Orange Trend Line.



3.4.4.3 Complex Example / Meter Resets / Outliers

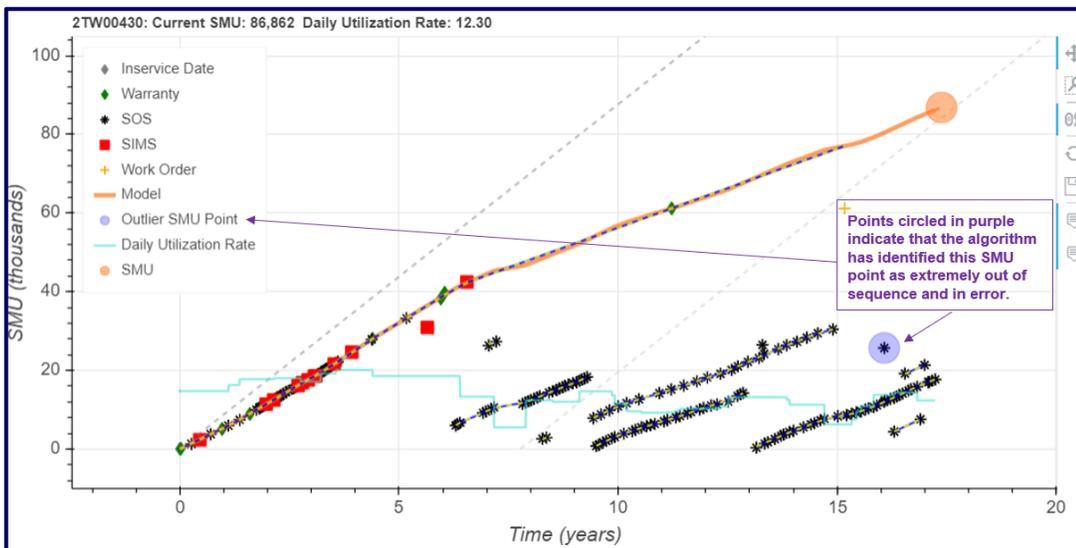
A serial number with a meter reset (or multiple resets):

If a serial number is identified as having had a meter reset, or multiple as in the example below, the trend lines will be identified by a Blue and Yellow dashed line. When a meter reset is identified those new SMU point from the new meter will be added to the lifetime value and will be represented by the Orange Trend line above it.



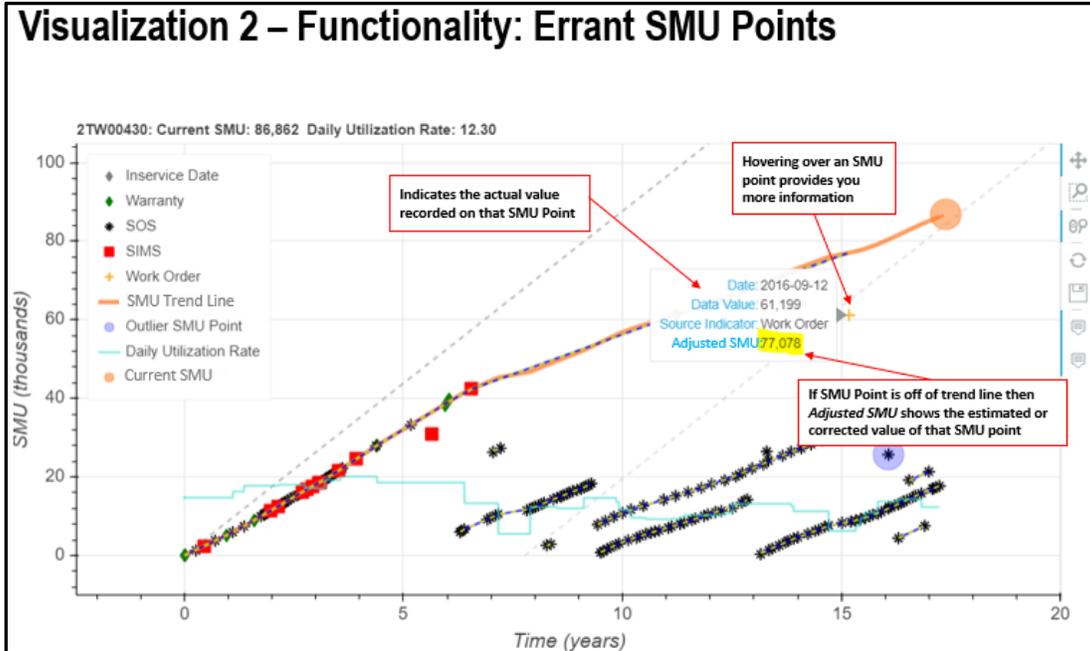
Outlier SMU Points that are identified as too far away from the trend line:

For an SMU point that the algorithm has identified as being too far of the trend to be considered in the calculation it will be highlighted with a purple circle as shown below.

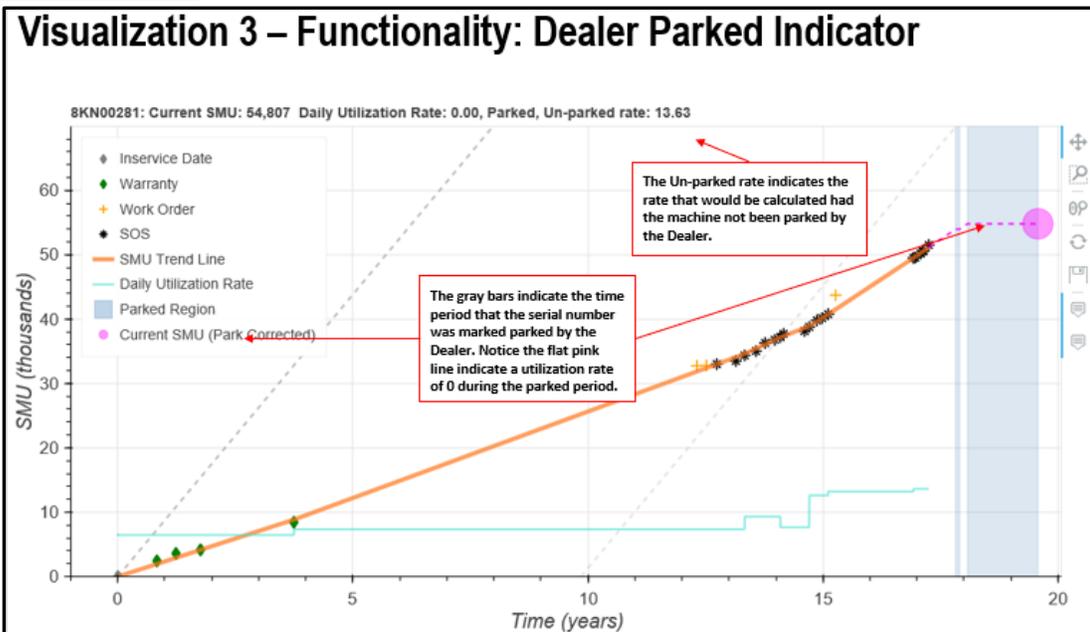


Hovering over an Errant or Outlier SMU Point:

For an SMU point that does not fit perfectly on the Orange Trend Line the Adjusted SMU is the algorithm's estimate for what the correct value for that SMU point should be based on the date of the SMU Point

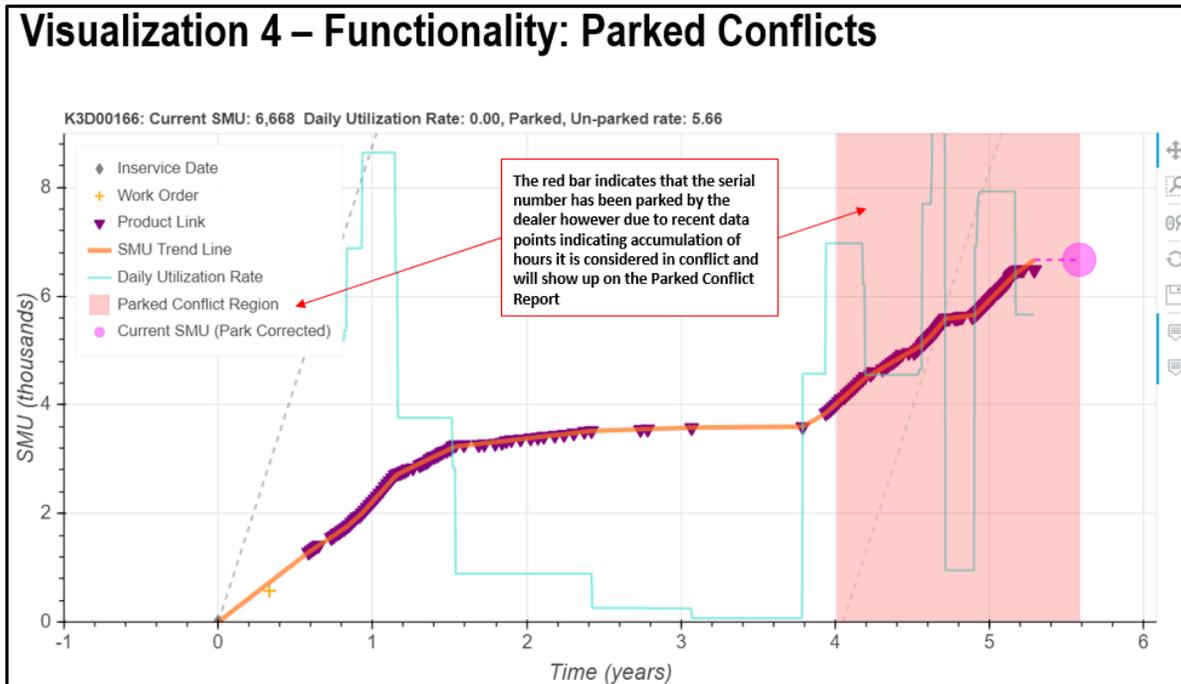


Dealer Parked Indicator:



Parked Conflict:

Visualization 4 – Functionality: Parked Conflicts



3.5 Sales and Opportunity Matching Logic

The purpose of Matching is to improve the projection of next the next repair interval. For instance, if the service is performed at 11K instead of 10K, then the next occurrence will be at 21K hours.

Matching does not directly affect POPS. POPS is calculated as Sales divided by Opportunity for a 12 month period.

Matching does not remove the opportunity or stop sending it to the dealer. Dealers should be working ahead on future opportunities which would not yet have a match.

Dealers are able to view a specific sales event that matched an opportunity event and conversely view a specific opportunity event that matched a sales event(s). As a result, all reports & COGNOS values will reflect the adjusted opportunity event information.

Matching a sale to an opportunity is done using the following:

- Manufacturer Code
- Serial Number
- Component Code Group
- Job Code Group
- Sales event value greater than or equal to 85% of the repair option parts value
- Modifier Code (if used on Opportunity)

- Work Application Code (if used on Opportunity)

Job code groups and component code groups are matched using cross-reference charts. Multiple detailed codes are part of fewer, more generic codes. Matching on the generic codes makes it easier to match a specific event. See **Appendix C** for a list of the job code cross-references. A component code cross-reference document is posted on <https://dealer.cat.com/olga> under the Administration tab.

Matching is based on the SMCS codes in Opportunities/Builder files. Most dealers are using “Standard” or “Approved” codes as defined in the SMCS Code booklet located on the SMI website – <https://smi.cat.com>. The codes on the Work Order must match the codes used on the Opportunity.

3.5.1 Matching Breakdown

The MAXIMUM Match rate will likely be between 5-15%, depending on the dealer’s POPS and how good they are about putting serial numbers on invoices

Here is an example:

Out of the entire annual opportunity (100% - or 100), the dealer’s POPS number is 50%. This means the dealer is getting 50% of the annual opportunity available (50% of 100 = 50). Then 60% of the dealer’s total POPS is for component repairs (60% of 50 = 30). After that, 30% of the invoices available for those component repairs have an identified serial number (30% of 30 = 9). This leaves us with a 9% match rate as our maximum for this dealer [Match Rate: 50% x 60% x 30% = 9%]. This would be the maximum percentage of matches between sales and opportunities if all of the match criteria is met 100% of the time.



3.5.1.1 Match Reporting

When reviewing match numbers, it is best to focus on the Opportunity tab of the Opportunity/Sales Search Report. This is because there could be more than 1 sale that matches to a single opportunity. This is due to matching criteria, such as that the SMU reported on the invoice is used in matching and if there are more than 1 invoice with the same SMU for a serial number, they will all be matched to the single corresponding opportunity (Ex: multiple repair events can be rolled into a single opportunity, so there could be separate sales by repair event). Sales can also be matched to opportunities that are not listed in the Opportunity tab.

Here is an example from Dealer X's Opportunity/Sales Search Report:

- Opportunity Tab --> Dealer X has 903,000 opportunities listed total. Out of these 903,000 opportunities, 714 are listed as "matched" (either automatic or manual).
- Sales Tab --> Dealer X has 369,000 sales listed total. Out of these sales, 1100 are listed as "matched" (either automatic or manual).

The true "match" number would be 714 from the Opportunity tab because that is the number of opportunities that were affected by a sales match. The 1100 number from the Sales tab would not be used because there are multiple sales that are attributed to the same opportunity.

3.5.2 Sales Data

OLGA displays the Dealers' sales history for the past three years.

Sales **include**:

- Parts sold under the configured Source of Supply codes (refer to [Section 2.6.8](#)).
- Labor to Cat equipment.
- Generic parts classified as miscellaneous charges (refer to [Section 2.6.5](#)).

Sales **exclude**:

- Parts under SOS codes that are not configured in OLGA.
- Non-Cat parts.
- Labor to non-Cat equipment.
- Miscellaneous charges, except configured generic parts.
- Travel charges.
- Core charges.
- Sales associated with customers or serial numbers excluded from OLGA under the exclusion configurations.

If the Dealer charges a flat rate amount for parts, OLGA will read the invoice and process the parts detail by each part line item and will not use the flat rate amount to enable classification of the part sales by major

class. This can result in the total sales amount allocated in OLGA to be different from the actual invoiced amount.

For flat rate labor invoices, OLGA will use the flat rate amount included on the invoice.

3.5.3 Original Calculation Run

When OLGA runs Dealer data in an Initial Run, it uses a calculation for the previous 3 years and the future 3 years.

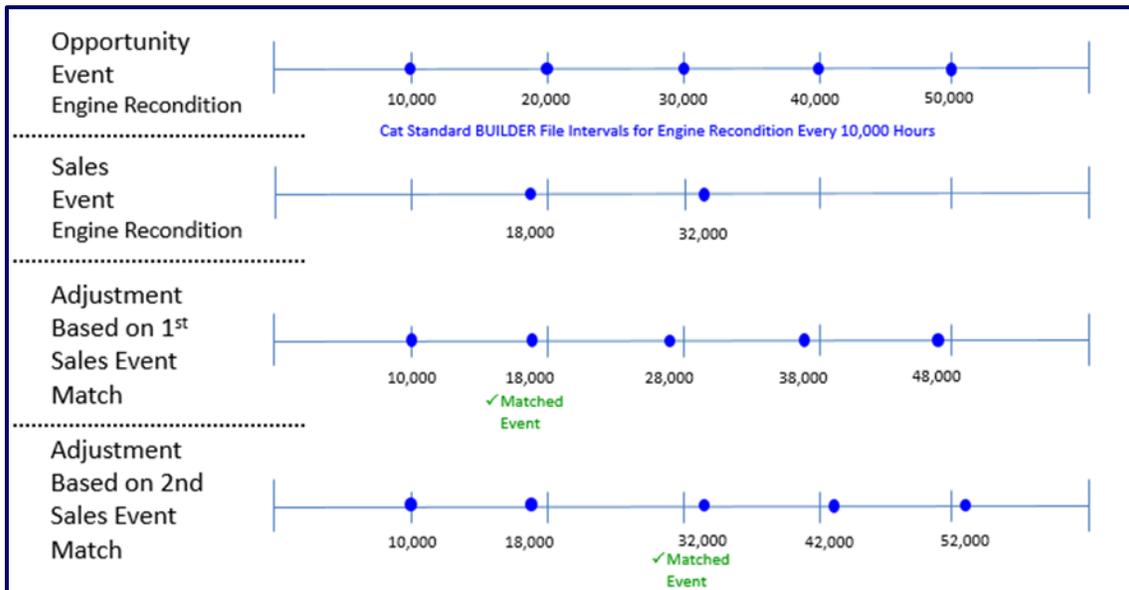
Example 1:

A Dealer's BUILDER file with the SN Prefix 4TR includes an engine recondition repair event at 10,000 hours and every 10,000 hours thereafter. This is shown in the first row of the image below.

The Dealer sends Caterpillar their invoice data, which includes two invoices with the sale of the parts and labor required to complete an engine recondition. The invoices state that the repairs were completed at 18,000 hours and 32,000 hours respectively. This is shown in the second row of the image below.

OLGA matches the sales to the closest opportunity events. In this case, the 18,000 hour repair is matched to the 20,000 hour opportunity and the future opportunities are adjusted to 28,000 hours, 38,000 hours, 48,000 hours and so on. The 10,000 hour interval still applies and will be the interval measure going forward. This is shown in the third row of image below.

OLGA matches the 32,000 hour repair to the 28,000 hour opportunity and the future opportunities are adjusted to 42,000 hours, 52,000 hours and so on. The 10,000 hour interval still applies. This is shown in the fourth row of the image below.



3.5.4 Updating Future Opportunities

Once OLGA is set up and configured, the monthly calculation process will take effect. To ensure consistent historical reporting, monthly calculation processing will occur each month using the most current information and process the data for the previous month and 3 years of future opportunities. **History will not be changed.** A match to an earlier opportunity does not change the original date and SMU of that opportunity event – only the future events are adjusted based on the match.

Exception to history changes: These data inputs will change historical descriptive information

Customer Name	City	Manufacturer Model
Location Customer Number	Zip Code	Sales Model
Parent Customer Name	Customer Phone Number	Product Family Name & Abbreviation
Branch Code & Description	Location Description	Equipment Age
Key Cat Account Number	Division Code & Name	Territory Indicator
Second Level Dealer Code	Primary Industry Indicator	Principal Work Code
Customer Type	Industry Code & Description	Equipment Indicator
Active Customer Indicator	Sales Rep Number	Territory Indicator Code & Description
Address Type	Sales Rep Type	Activity Indicator Code & Description
Country	Sales Rep Name	Rental Agreement Type
Sate/Province	Manufacturer Name	Principal Word Code & Description
County	Manufacturer Year	Application Code Description

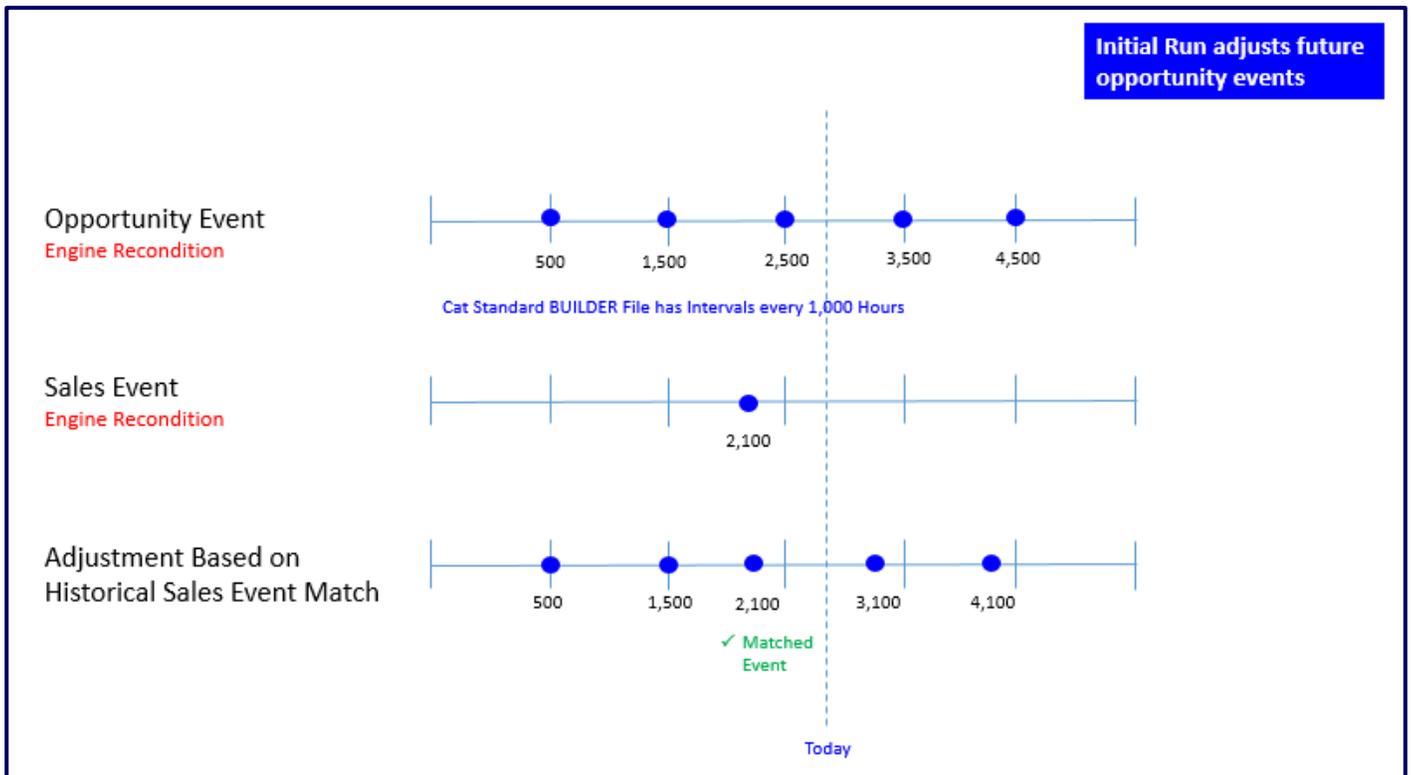
This processing replaces the initial calculation processing that has been occurring. The initial calculation processing is for 3 years history and 3 years of future opportunities. It basically starts over each run and re-processes everything each time the calculation runs.



Best Practice: An opportunity series refers to each of the repair events rolled up to the opportunity (for example – the job codes for recondition before failure, recondition after failure, and the remove and install).

Example 1:

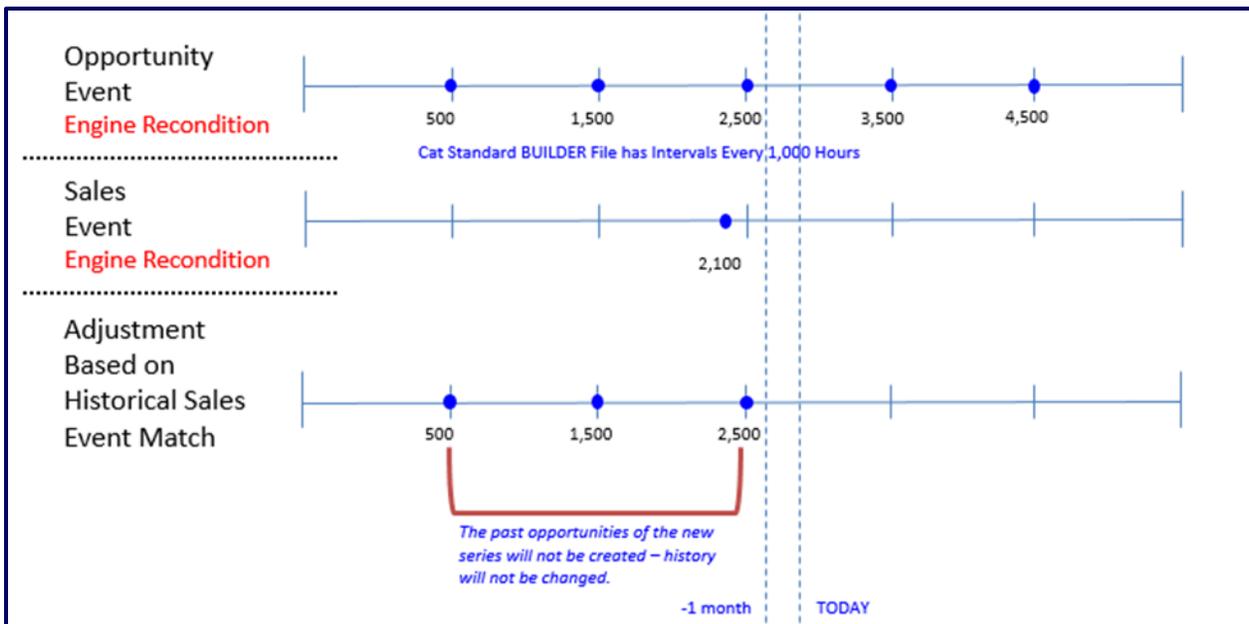
After a calculation run, any past opportunity events will be matched and will adjust the future hour intervals.



Example 1, cont.:

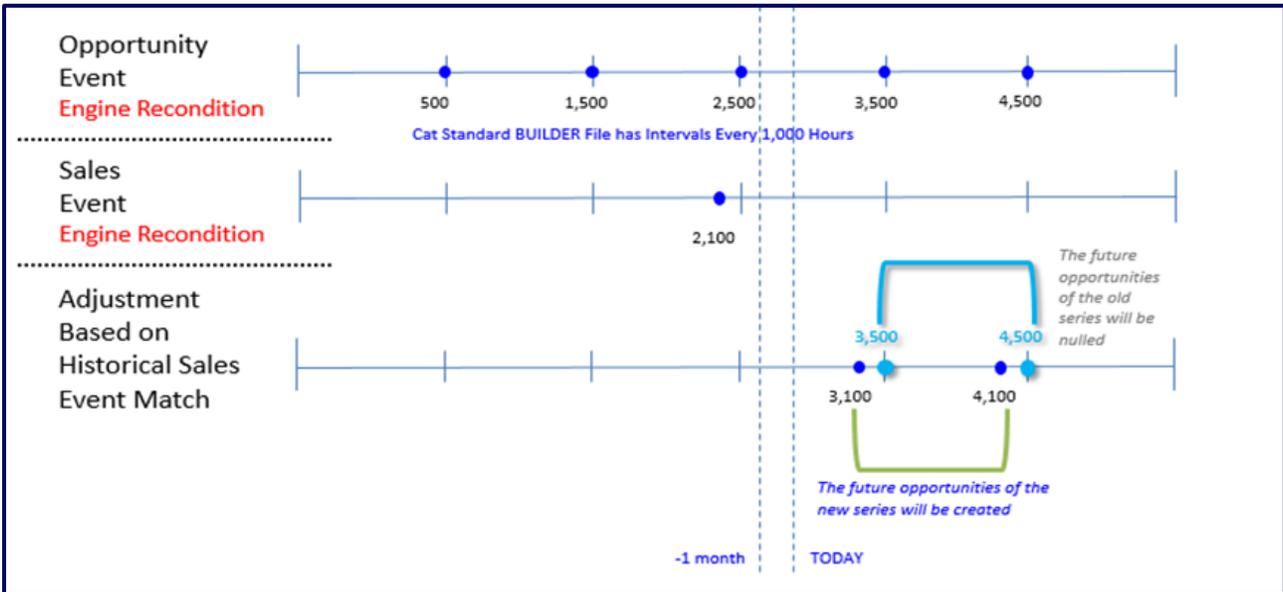
The BUILDER file states that a PM 2 service occurs at 500 hours and every 1,000 hours thereafter. OLGA maps out the repairs at these time intervals shown in first row of image below.

The Dealer sends Caterpillar their invoice data, which includes an invoice with the sale of the parts and labor required to complete a PM 2 service. The invoice states that the service was completed at 2,100 hours shown on second row of image.



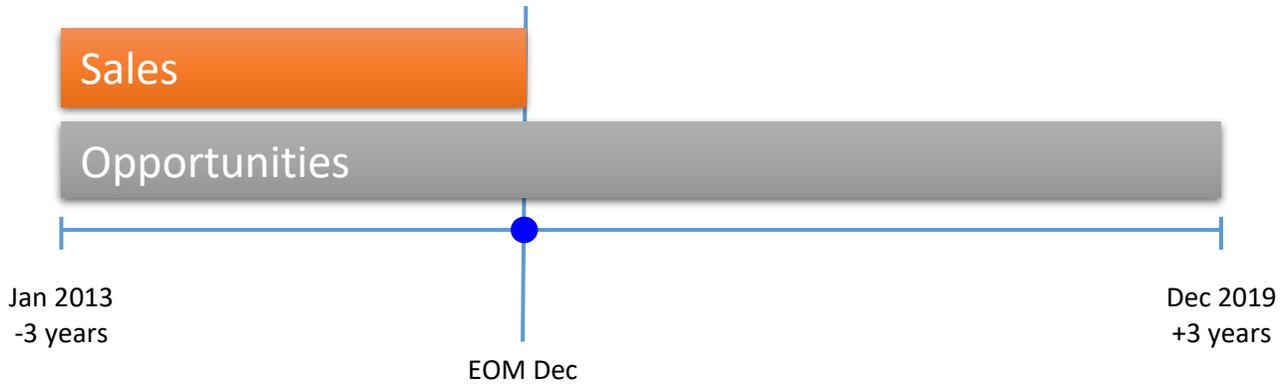
Example 1, cont.:

OLGA makes the adjustment for the future PM2 opportunity events based on the most recent repair occurring at 2,100 hours. The last row shows the new adjusted future opportunity based on the last event occurring at 2,100 hours. The future opportunity from what OLGA calculated will be nulled and the new future opportunity of the series will be created.

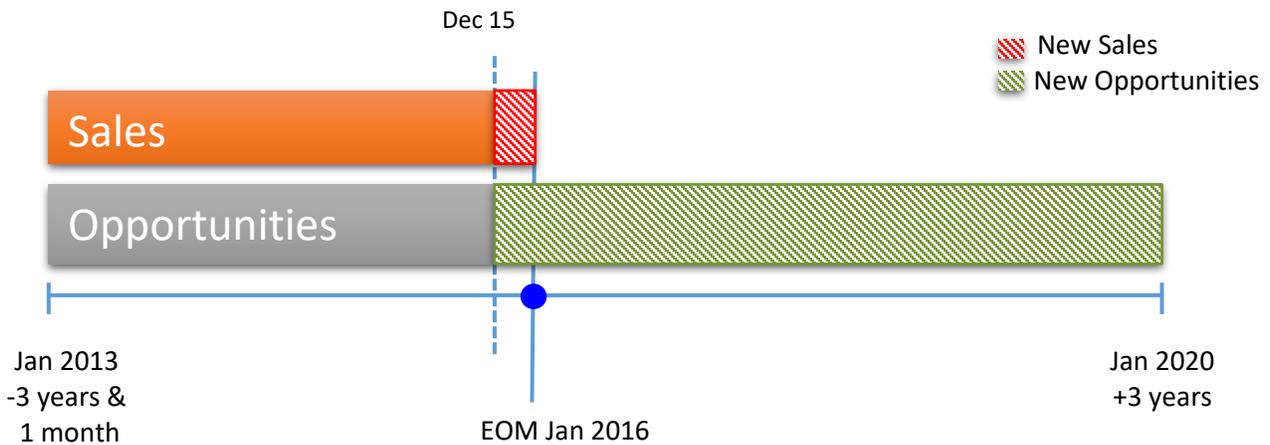


3.5.4.1 How Monthly Runs Work

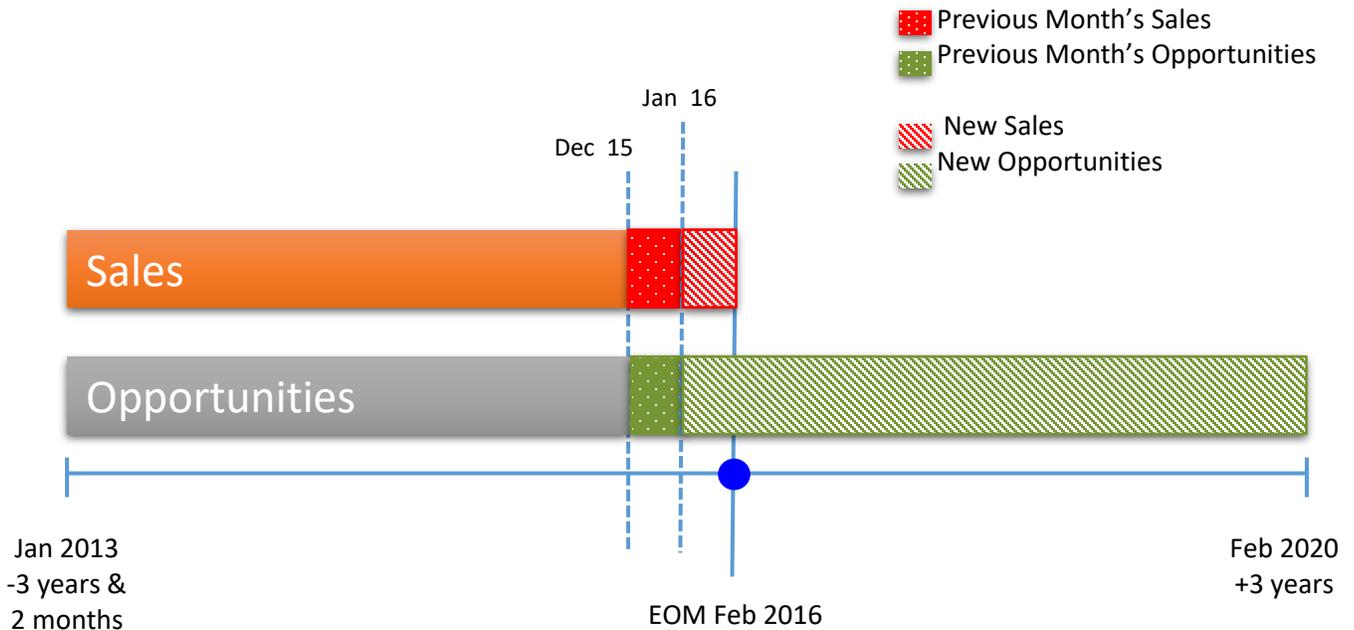
1st Month – Standard Initial Run (Ex: End of Month December 2015)



2nd Month – Scheduled Monthly Run (Ex: End of Month January 2016)



3rd Month – Scheduled Monthly Run (Ex: End of Month February 2016)



3.5.5 Manual Match

Matching an opportunity event to a sales event allows for more accurate opportunity event projections. The Manual Match feature allows the Dealer to identify an opportunity event as complete if the opportunity event was completed by:

- The customer
- A competitor
- The Dealer but not automatically matched

The ability to create a manual match is governed by page permission within Administration, User Roles. Dealer administrators must add View and Edit access for this capability.

Page	View	View & Edit
Opportunity/Sales Search (Includes Manual Match)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Past And Future Opportunities (By Customer)	<input checked="" type="checkbox"/>	
Lead Score Report	<input checked="" type="checkbox"/>	
Customer Report	<input checked="" type="checkbox"/>	
Equipment Report	<input checked="" type="checkbox"/>	
Utilization Rate Visualization	<input checked="" type="checkbox"/>	
Processing Errors	<input checked="" type="checkbox"/>	
Calculation Errors	<input checked="" type="checkbox"/>	
Data Errors	<input checked="" type="checkbox"/>	
Customer Exclusion Report	<input checked="" type="checkbox"/>	
Duplicate Serial Number Report	<input checked="" type="checkbox"/>	
Parked Equipment Conflict Report	<input checked="" type="checkbox"/>	

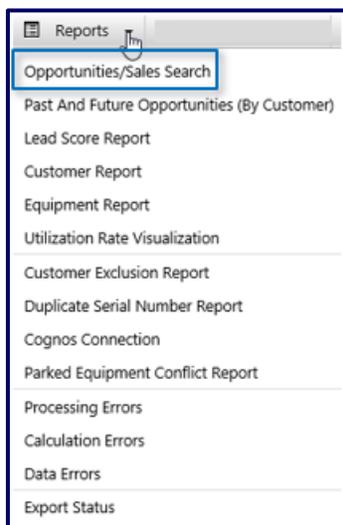
Dealers can create a manual match for their opportunities in the Opportunities/Sales Search Report and view the Match type created with each opportunity. The types of Matches available to view are Automated, Manual, and Unmatched.

Note: A dealer can still view the details of a matched opportunity on the Matched Details page, even if the opportunity has been disabled or falls outside the report date range. However, it will not be available to view on the Opportunity/Sales Search report.

3.5.5.1 How to Use the Manual Match Function in OLGA

1) Identify Opportunities by generating a report

- a. In the OLGA web application, navigate to the Reports → Opportunities/Sales Search Report



b. Click the filter → “Match Type”

The screenshot shows the 'Opportunities/Sales Search' interface. It features several filter sections: Customer, Product, Opportunity/Sales Event, and Location. The 'Match Type' dropdown menu in the Opportunity/Sales Event section is highlighted with a blue box. Below the filters, there is a 'Date Range' section with 'From' and 'To' date pickers, and two buttons: 'Generate Report' and 'Export to Excel', both of which are also highlighted with blue boxes.

c. Filter on Automated, Manual and/or Unmatched.

- i. **Automated Match Opportunities** are generated by OLGA using Dealer data. When selecting “Automated,” Dealer will be able to see the automated match created by OLGA, showing Sales and Opportunities.
- ii. **Manual Match Opportunities** are created by the Dealer. When the Dealer creates a Manual Match, the Match Type will change to a Manual Match after a calculation run has occurred.
- iii. **Unmatched Opportunities** are where the Dealer has the option to create a Manual Match. Unmatched opportunities are where OLGA has not created an Automated Match and a Manual Match has not been created.

d. Click “Generate Report”

- i. The last column of the Opportunities tab shows the Match Type. The hyperlink will show more information about the match.

<u>Lead Score</u>	<u>Confidence Index (%)</u>	<u>Contract</u>	BUILDER Info	Match Type
-------------------	-----------------------------	-----------------	--------------	------------

- ii. Click on the “Unmatched” hyperlink to edit the opportunity and create a Manual Match.

<u>Lead Score</u>	<u>Confidence Index (%)</u>	<u>Contract</u>	BUILDER Info	Match Type
8	40	No Contract	Details	Unmatched

2) Complete Manual Match and Save

- a. The Dealer can fill in the information for a Manual Match using the following criteria:
 - i. SMU Value (do not use punctuation to delineate numerical value)
 - ii. SMU Date
 - iii. Reason for Match
 - iv. Invoice Number (if Opportunity is matched by Dealer)

Manual Matches

Add

SMU Date *

SMU *

Reason For Match *

Invoice Number

* Required Fields

Note: This Manual Match may be edited until next calculation run.

- b. Click SAVE
- c. After clicking Save, the Dealer has the option to cancel, delete, or change the Manual Match.

Manual Matches

Edit

SMU Date *

SMU *

Reason For Match *

Invoice Number

* Required Fields

Note: This Manual Match may be edited until next calculation run.

3) Run the Calculation

- a. The Manual Match details are used to create a “sales-like event” similar to the Automated Match logic where a sales event is matched to an opportunity event.
- b. During the calculation run, OLGA will evaluate the Manual Match and select the closest Target SMU event occurrence, regardless of which opportunity was selected for the Manual Match.

Example 1:

A Dealer open the Manual Match link from an opportunity with an SMU of 8,511 on April 14, 2015. When the Dealer writes the current SMU of 11,511 and a date of 8/23/2015, OLGA will create an Automated match. In the image below, the closest SMU and date matching the dealer’s data is actually SMU value of 12,511 on 9/23/2015.

Since the match was processed to a different opportunity than what was originally selected, the Processed Manual Match details will be displayed within the opportunity used vs. the original opportunity selected.

TRIDENT CIVIL INC. NAD04140		5451 – BUCKET CYLINDER 020 – RECONDITION		
696 = Monthly Utilization				
04/23/2014	10/13/2014	04/04/2015	08/23/2015	03/13/2016
511	4511	8511	12511	16511
01	02	03	04	05

Manual Match, M1 for O3
 (SMU: 11511, SMU Date:
 8/21/2015)

↘

Adjustments after Monthly Run of April				
04/23/2014	10/13/2014	04/04/2015	08/23/2015	03/13/2016
511	4511	8511	12511	16511
01	02	03	04	05

M1 was created for O3
but matched to O4

4) View Processed Manual Matches

- a. After a calculation run, the match is added to the opportunity.

Processed Manual Matches					
SMU Date	SMU	Reason For Match	Invoice Number	Updated By	Updated Date (MM/DD/YYYY)
01/31/2017	129.000	Completed By Customer		Andrea A Berke	07/23/2015 11:05:41 AM

3.6 POPS and POLS Calculation

Based on the included customer and equipment data in OLGA, the OLGA web application provides calculations for Percent of Parts Sales (POPS), Percent of Labor Sales (POLS) (formerly referred to as Labor DCAL), % of total Parts and Labor Sales, and POLS Hours.

POPS (percentage of part sales) and POLS (percentage of labor sales) are metrics indicating the Dealer’s parts and service sales portion of the business compared to total opportunity. The calculations are simply sales divided by opportunity within the categories of parts and labor.

$$\frac{\text{PARTS SALES}}{\text{OPPORTUNITY}} = \text{POPS}$$

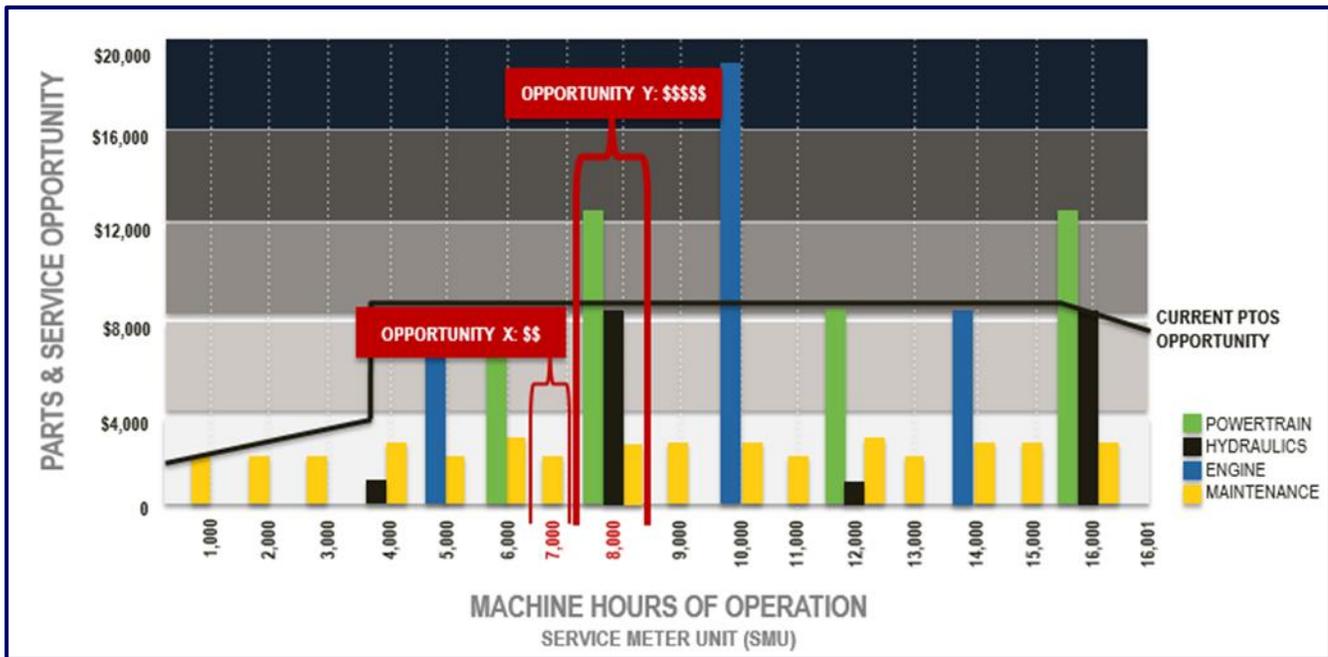
$$\frac{\text{LABOUR SALES}}{\text{OPPORTUNITY}} = \text{POLS}$$

3.6.1 Opportunity Calculation: Then (PTOS) and Now (OLGA)

There are significant differences between OLGA and PTOS (Product Tracking Opportunity System) opportunity calculation logic. Currently, PTOS is Caterpillar's parts and service opportunity and POPS-C tracking tool that will soon be replaced by OLGA. This section explains the high level differences in inputs, processing and outputs.

3.6.1.1 OLGA and PTOS Comparison

PTOS focuses on the past rolling 12 months and bases opportunity calculation using historical averages while allowing for many manual adjustments. Over the lifetime of the equipment, the result is a "flat" future opportunity. The in graph below, PTOS is represented by the solid line going across the graph.



OLGA focuses on the future – it is a forward looking, event-based opportunity calculation using serial number specific lifecycle position and Caterpillar recommended repair event intervals. The result is specific, actionable opportunity events projected at specific future target dates. OLGA opportunity events in the graph are the bars that represent different opportunity events based on Major Class and hours of operation using the SMU reading.

The list below provides a high level differences in logic between PTOS and OLGA.

	PTOS	OLGA
Opportunity	Opportunity Source = Builder	Opportunity Source = Builder
	Builder Coverage by Average of All S/N Prefixes for a Given Model	Builder Coverage by S/N Prefix Level -If a S/N Prefix is Not Covered, No Opportunity is Generated
	Equipment Usage Factors -Cost Per Hour -Annual Hours -Age Equipment Factors (Averages)	Equipment Usage Factors -Equipment Repair Event Frequency Specific to S/N Prefix -Utilization Rate Specific to Each S/N
	Averaged Over Life of Product -Individual Opportunities Rolled up Over Estimated Life of Product -Total Averaged Over Life of Product	Individual Opportunities Rolled Up to a Total For a Period of Time
	Auto Exclusions -Non-Revenue Accounts (Including TEPS & Rental) -Accounts with No Equipment & No Sales in Last 24 Months	No Auto Exclusions -All Exclusions Must be Configured
	Dealer Manual Adjustments -Opportunity by Parts Major Class, Industry & Branch -Cost Per Hour and Annual Hours by Model & Industry	Dealer Manual Adjustments -Opportunity by Parts Major Class
	Pricing Based on a Base Price Level and Bi-Annual Price Adjustments	Pricing Based on Current Pricing in Dealer's Area Price File
	Uses Dealer Adjustments to Try to Match Sales & Opportunity at Common Price Level	Aligns Sales & Opportunity at Estimated Dealer List Price Level
	POPS	At Dealer Level POPS Metric Will be Similar to OLGA
Lower Level POPS Will Be Different than OLGA (Industry, Major Class, etc.)		Lower Level POPS Will Be Different than PTOS (Industry, Major Class, etc.)

Best Practice: It is important to understand the differences in opportunity calculation logic and how Dealer data values are affected.

We recommend that Dealers compare the data to gain a better understanding of the differences. One way to start is by creating reports/comparisons using a single dimension from OLGA and from PTOS.

In the next example, three industries are compared showing Sales, Opportunities, POPS, equipment count and customer count.

Once the values with significant differences are identified at an aggregated level, create drill-downs into each set of data to review the lower level detailed data.

One recommendation is to create multi-dimensional reports by branch, PSSR, equipment type or major class values from both OLGA and PTOS. This helps to identify causes or areas of differences. The example below is a demo data set showing a sample of data that was created for comparison.

Example 1:

An OLGA Dealer user decides to run a comparison of three industries with their POPS values, equipment count and customer count in PTOS and OLGA.

Comparison Input:

OLGA Values					
Industry	Sales	Opportunity	POPS	Customer Count	Equipment Count
Agriculture	\$ 500,000	\$ 900,000	56%	34	50
Mining	\$1.3M	\$ 3.7M	35%	55	79
Surface Transportation	\$ 900,000	\$ 7M	13%	250	500

PTOS Values					
Industry	Sales	Opportunity	POPS	Customer Count	Equipment Count
Agriculture	\$ 500,000	\$ 900,000	56%	34	50
Mining	\$1.8 M	\$ 4.4M	41%	55	91
Surface Transportation	\$ 900,000	\$ 3M	30%	100	1,000

In this example, the POPS values customer count and equipment count for Mining and Surface Transportation Industries are different. Here are some reasons why.

- Differences in configuration exclusions and inclusions between PTOS and OLGA can cause a variation in included customers and equipment.
 - When looking at the Surface Transportation industry, we see a higher customer count for OLGA than PTOS.
 - This could be because rental is included in OLGA but was not in PTOS.
- Calculation discrepancies in PTOS or OLGA that are under/over stating opportunity.
 - In this example, the understated Opportunity in mining for OLGA can be different from PTOS if SMU values or Utilization rates differ.
- Differences in the logic between PTOS and OLGA (PTOS using flat logic with more averages and OLGA using variable logic with more real time data).

Note: PTOS will not be retired until Dealers have been successfully transitioned to OLGA. OLGA deployment began in 4Q2014. POPS-C reporting via PTOS will continue throughout the OLGA transition timeframe.

Once a Dealer has successfully completed the transition to OLGA they can work with their DSD OLGA Consultant to determine the appropriate time to discontinue the use of PTOS.

3.7 Lead Score & Confidence Index

The purpose of including a lead score and confidence index into the OLGA application is to help dealers prioritize opportunities. Each opportunity will have weighted priority that is determined using additional data sources. Additional data sources include: Cat Inspect (Condition Monitoring), Scheduled Oil Sampling (SOS), Customer Support Agreements (CSA) Contracts, and Equipment Protection Plan (EPP) Contracts.

OLGA's lead scoring is a process with logic to calculate Lead Score (LS) and Confidence Index (CI) values for included opportunities. OLGA lead prioritization is a subset of the overall dealer opportunity and lead management process.

3.7.1 Lead Score

Lead Score is a measure of opportunity significance. Lead Scores range from 0-15.

Lead Score	
Value	Details
15	Serial Number has a SOS or Condition Monitoring red alert
14	Serial Number has a SOS or Condition Monitoring yellow alert
1-13	Scored using the lead score formula
0	Serial Number is covered by a CSA or EPP contract

OLGA follows a validation process to score opportunities:

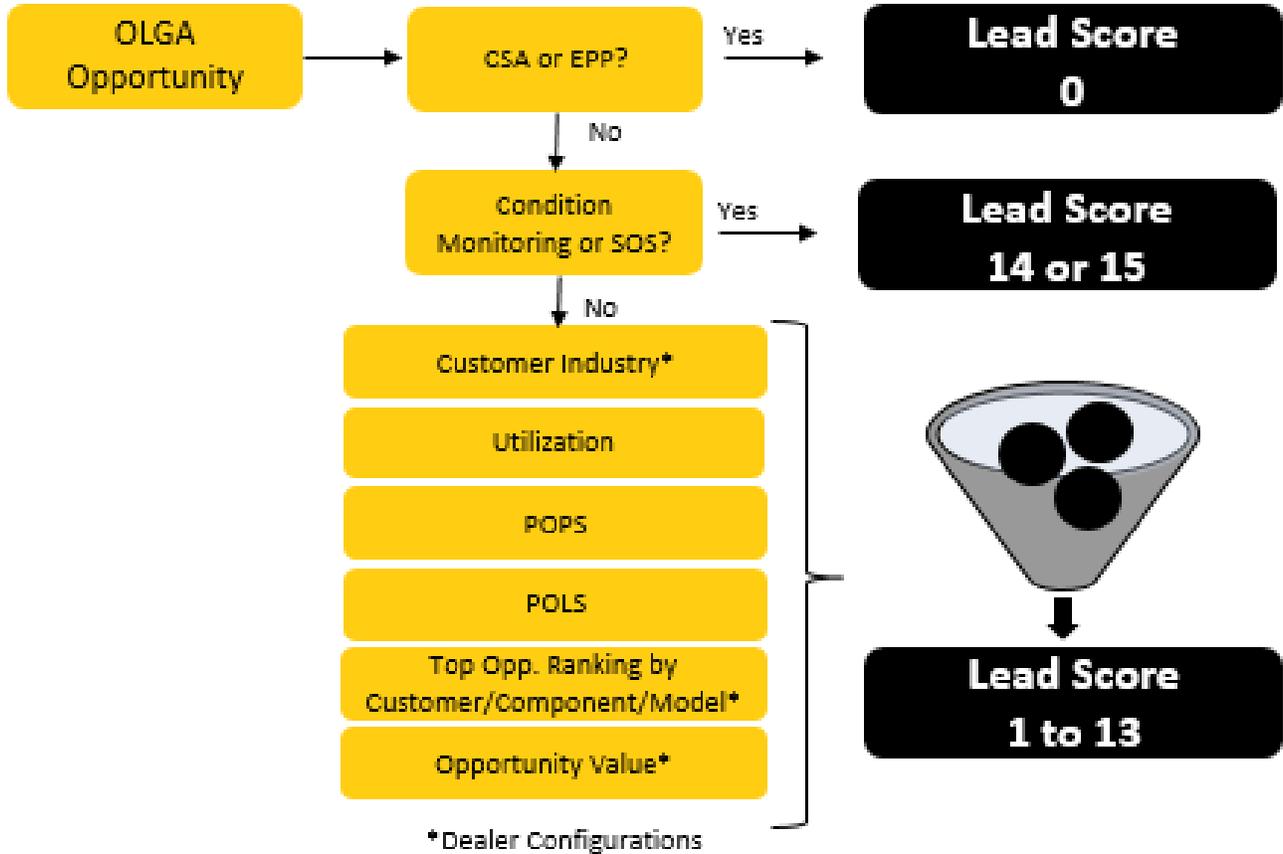
- If there is a CSA or EPP for the opportunity, then the score is set at 0.
- If there is a Condition Monitoring or SOS alert, then the opportunity is scored either a 15 (red alerts) or a 14 (yellow alerts). Be sure to verify with your Condition Monitoring and/or SOS team on these items to ensure action is being taking.
- If there are no CSA or EPP contracts and there are no red or yellow alerts from Condition Monitoring or SOS, then a calculation formula is used to determine the lead score. The formula considers the customer industry; utilization rate; POPS; POLS; top opportunity rankings for customer, component code, and model; and the opportunity value when calculating the lead score.

There are some inputs to the formula that can be weighted by the dealer. See **Section 2.6.9 – Lead Score Configuration** for more information. These include:

- Customer industry
- Top opportunity rankings by customer, component code, and model
- Opportunity value

There are some items that are not Configurable. These include Utilization Rate, POPS, POLS, CSA Contracts, EPP Contracts, Condition Monitoring, and SOS.

- Utilization Rate → A higher Utilization Rate means there is a higher emphasis on that unit or serial number when calculating the lead score.
- POPS/POLS → A lower POPS or POLS number means there is a higher emphasis on that customer when calculating the lead score (inverse relationship).
- CSA/EPP → If the serial number is covered by one of these contracts, then it will automatically get a score of 0.
- Condition Monitoring/SOS → If there is a red or yellow alert, then it will automatically get a score of 15 or 14, respectively.



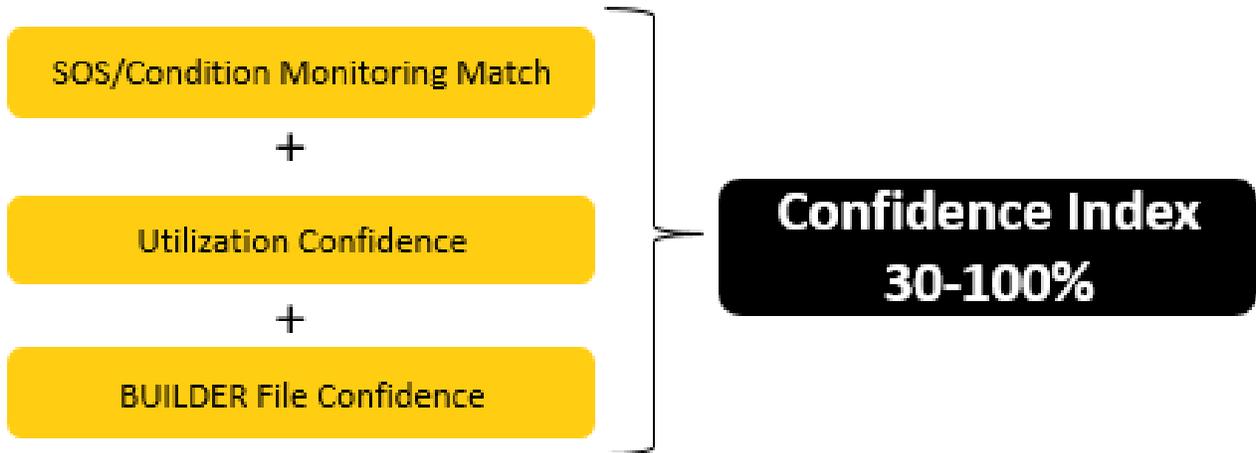
3.7.2 Confidence Index

Confidence Index is a measure of how sure the system is that the opportunity is correct. Confidence Index ranges from 30-100%.

Confidence Index	
Value	Details
100%	Serial Number has a SOS or Condition Monitoring red alert
80%	Serial Number has a SOS or Condition Monitoring yellow alert
30-70%	Scored using the confidence index formula
30%	Default Base Value

The confidence index formula works as simple addition. From the base rate of 30%, for each of these items we will add 10% to the score.

Confidence Index Formula	
Value	Details
10%	Dealer BUILDER File
10%	Utilization Rate Type = Actual
10%	Product Link Connected Asset
10%	Last SMU date is within 180 days of the latest run date



Example 1:

An opportunity's confidence index is being calculated. The default base rate is 30%. The dealer has a dealer Builder File that covers this opportunity, so 10% will be added to the base rate. The serial number has an Actual Utilization Rate, so 10% will be added to the base rate.

$30\% + 10\% + 10\% = 50\%$. The confidence index on this opportunity is 50%.

4. Interpreting OLGA Data

4.1 OLGA Header Bar

The OLGA Header Bar shows details about who is accessing the application.

<i>Name:</i>	Person logged into the OLGA web application.
<i>Currency:</i>	Default currency as defined in configurations.
<i>Language:</i>	Language shown in the application
<i>Dealer:</i>	Dealer name and code
<i>Pricing Strategy:</i>	Pricing in OLGA is in Suggested Consumer List price
<i>End Of Month:</i>	Last full month of data run in OLGA
<i>Last Run Date:</i>	The date when the OLGA data was last processed

Name :	Brianne DeVenney
Currency :	USD - US DOLLAR
Language :	English
Dealer:	Demo Dealer - TD11
Pricing Strategy :	Suggested Consumer List
End Of Month :	Sep 2016
Last Run Date :	10/26/2016

4.2 OLGA Tabs

When navigating the web page, the tabs across the web application provide the following information.

<i>Home:</i>	Application landing page
<i>Reports:</i>	Menu of reports available in the application
<i>Configurations:</i>	Menu of configurations available in the application
<i>Administration:</i>	Dynamic menu only for OLGA Admins for account setup options

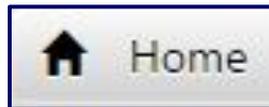
Help: Link to documentation about the OLGA application

Logout: Allows user to logout of the application



4.2.1 Home Tab

The Home tab is the home page dashboard.



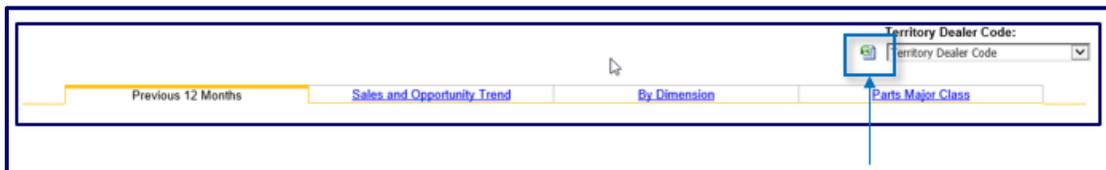
4.2.1.1 If the user has OLGA COGNOS access...

If the user has OLGA COGNOS access, then they will see analytical outputs from that system including summary metrics for the past 12 months as well as visual representations.

Caterpillar provides the following definitions for what is referenced on the OLGA Home Page

- POPS = Percentage value of sales value/opportunity value for parts
- POLS = Percentage value of sales value/opportunity value for labor
- Total row displays the total parts and labor sales, total parts and labor opportunity and total percentage.
- POLS Hours = Percentage value of sales hours/opportunity hours for labor.

Territory dealer code can also be selected for an overall filter for the dashboard graphs.



The export to excel feature can be seen on the homepage next to Territory Dealer Code and is available to export the data shown in each Cognos dashboard tab. This feature will easily transfer data shown within the application to an excel file.

Previous 12 Months

Territory Dealer Code:

Previous 12 Months
Sales and Opportunity Trend
By Dimension
Parts Major Class

POPS-C & POLS - Previous 12 Months By Industry Vertical			
	Sales Value	Opportunity Value	Percent (%)
POPS-C	58,234,665	453,507,841	12.8%
POLS	25,002,349	182,997,206	13.7%
TOTAL	83,237,014	636,505,047	13.1%
POLS Hours			
POLS Hours	309,436	1,805,646	17.1%

Dimension:

Industry Vertical:

- Construction Industries
- Energy & Transportation
- Resource Industries
- Unknown

[Select all](#) [Deselect all](#)

The POPS, POLS, and total values are calculated at the Dealer level, using a timeframe of the previous 12 months. Dimensions & sub-dimensions can be chosen to filter POPS and POLS.

Sales and Opportunity Trend

Allows the Dealer to view a rolling 12 month trend of sales data, along with POPS – C and Opportunity. Option to filter by “Total Value,” “Labor Value,” or “Parts Value.”

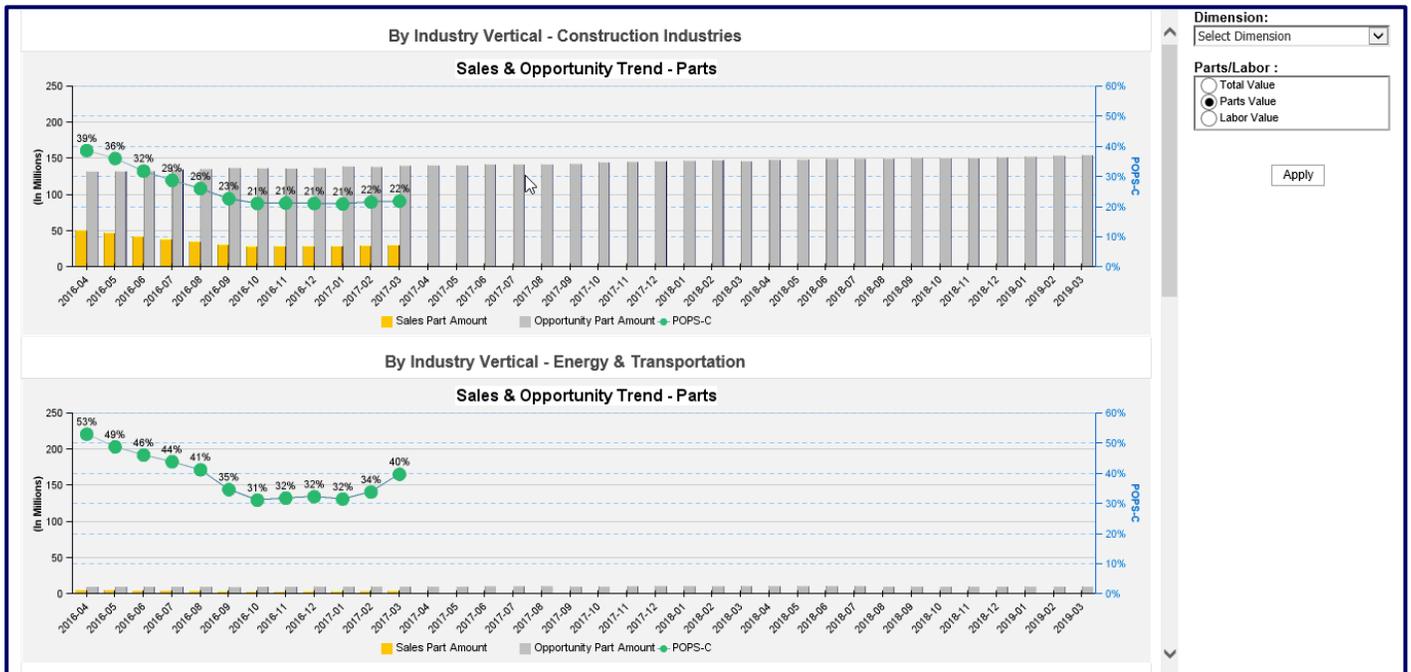
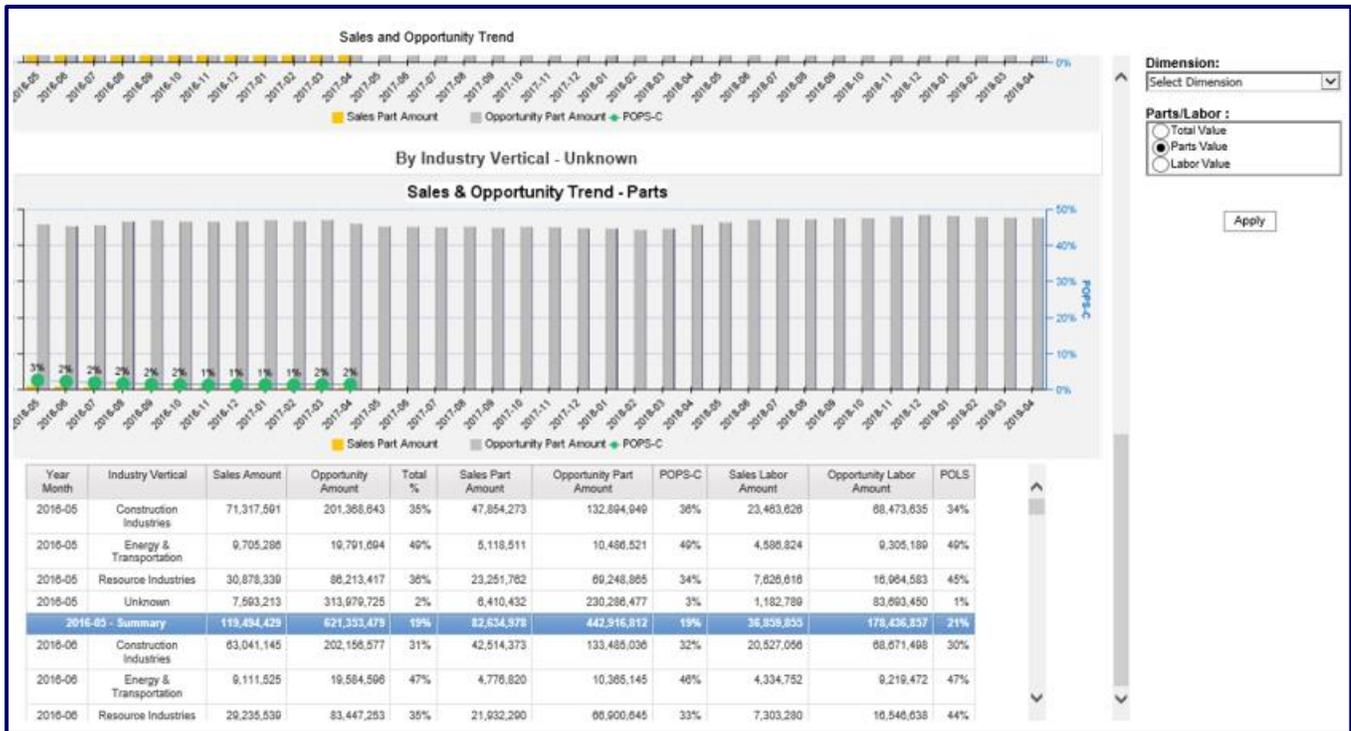


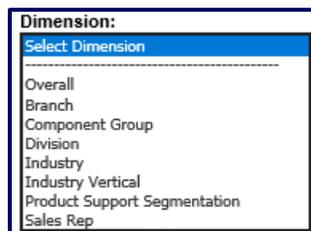
Table View

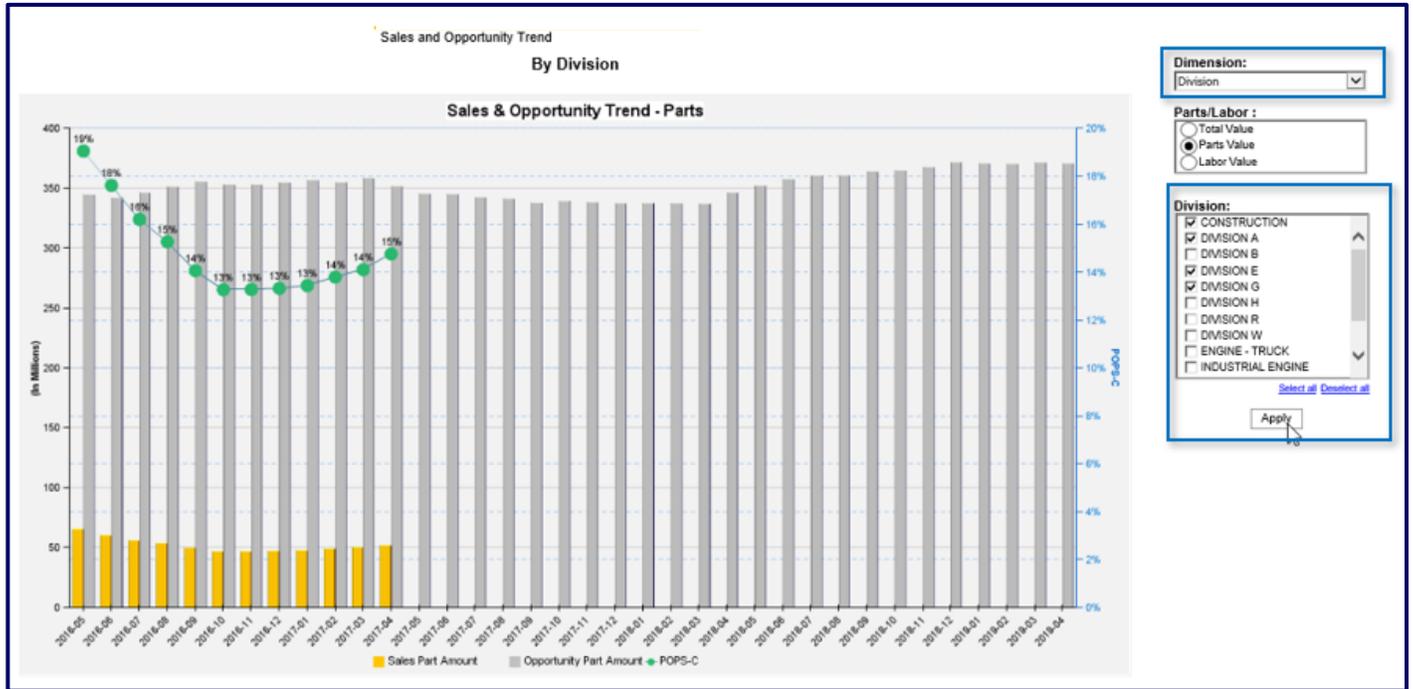
A numeric table summary view of data is also available utilizing the scroll bar to view values available below the graphical display. Multiple views are also available to export through the export to excel feature.



Dimensions

Users can also select different dimensions on the dimension drop down menu (located within the Sales and Opportunity Trend tab) to generate reports that update the look of the visual graph. An option to add additional specifications within the dimensions are also available. The following illustration showcases a divisional level view of the sales and opportunity trend by specific divisions selected.





In another example, the Industry Vertical view will display separate graphs for each vertical. The opportunity is now displayed as a bar instead of a line. A summarized table view of the data has been added below the charts (may need to use the scroll bar within the chart window to view the table) and can be exported to Excel. See graphic on next page.



By Selected Dimension

POPS-C data is presented through a customizable view of data using several filters.

- Create new reports by selecting either Branch, Component Group, Division, Industry, Industry Vertical, Product Support Segmentation, or Sales Rep.
- Second filter- narrow down the value by “Total Part & Labor Value,” “Part Value,” “Labor Value,” and “Labor Hours.”
- Third filter - select a subset of the data to be shown in the graph.

By hovering over each bar in the graph, the total sum of opportunities or sales will appear, along with the dimension filtered on the graph.

POPS-C metric is in its own graph, separate from but next to Sales and Opportunity.

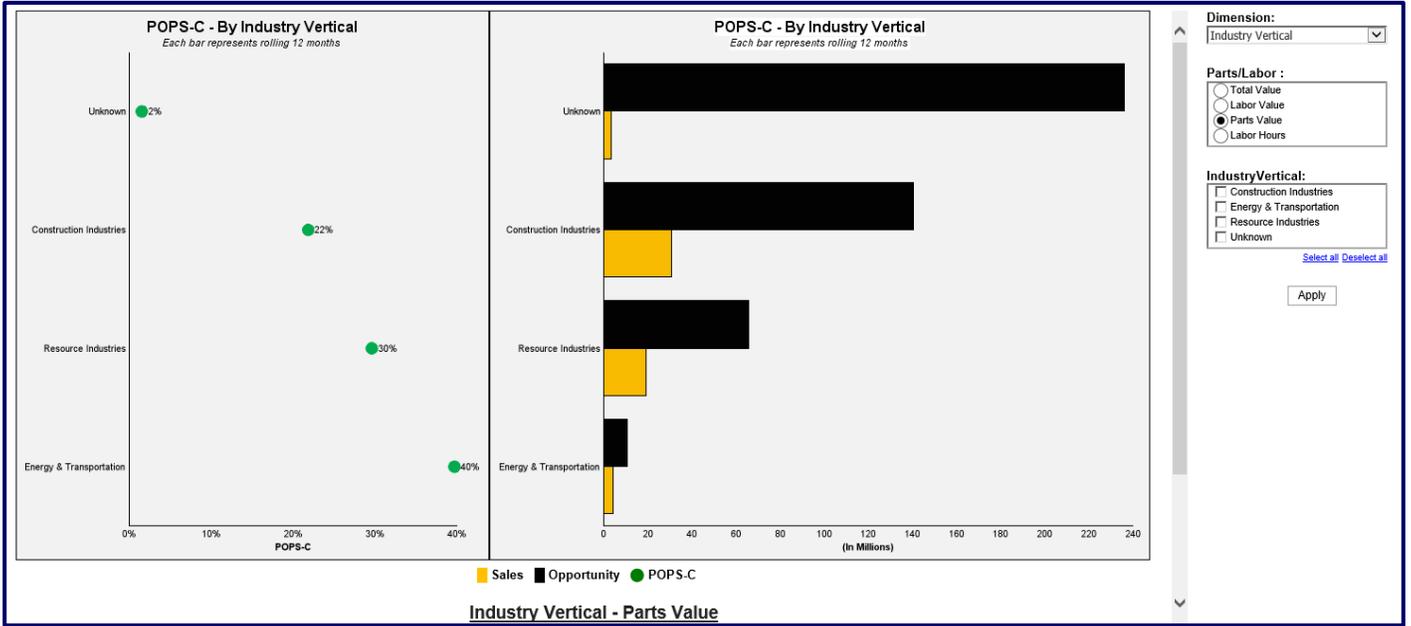
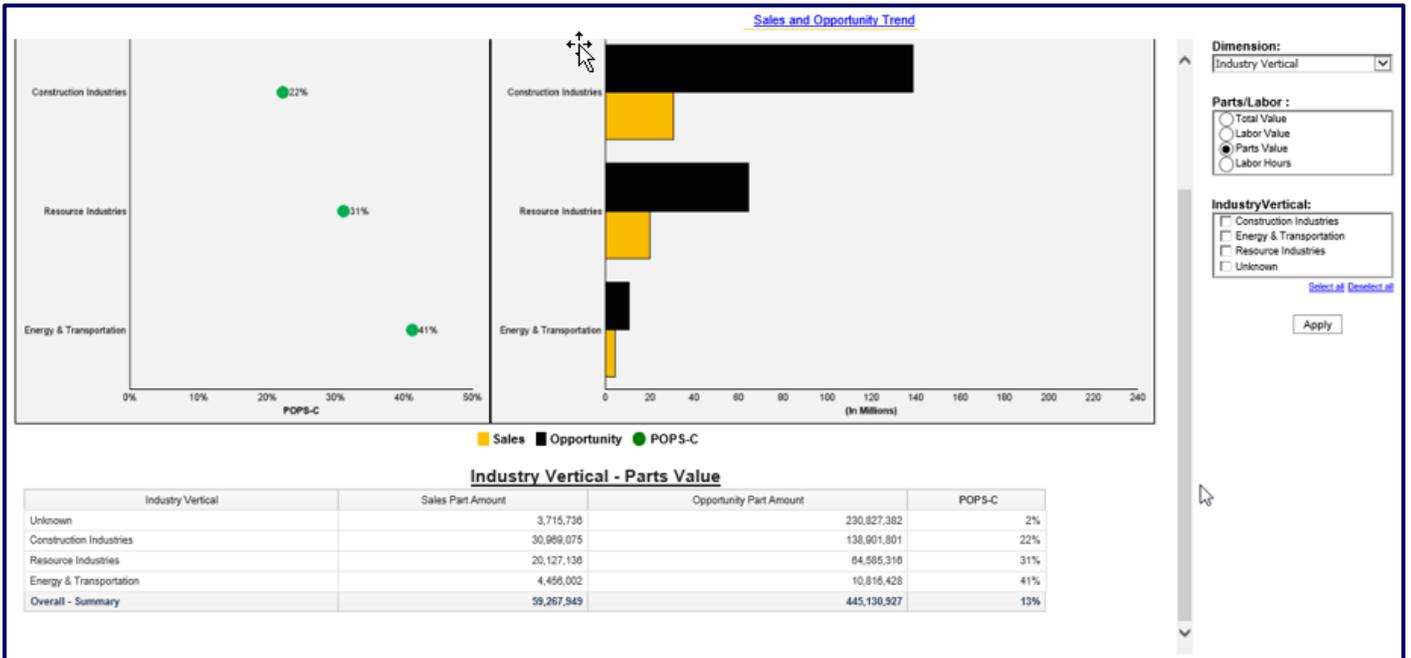


Table View

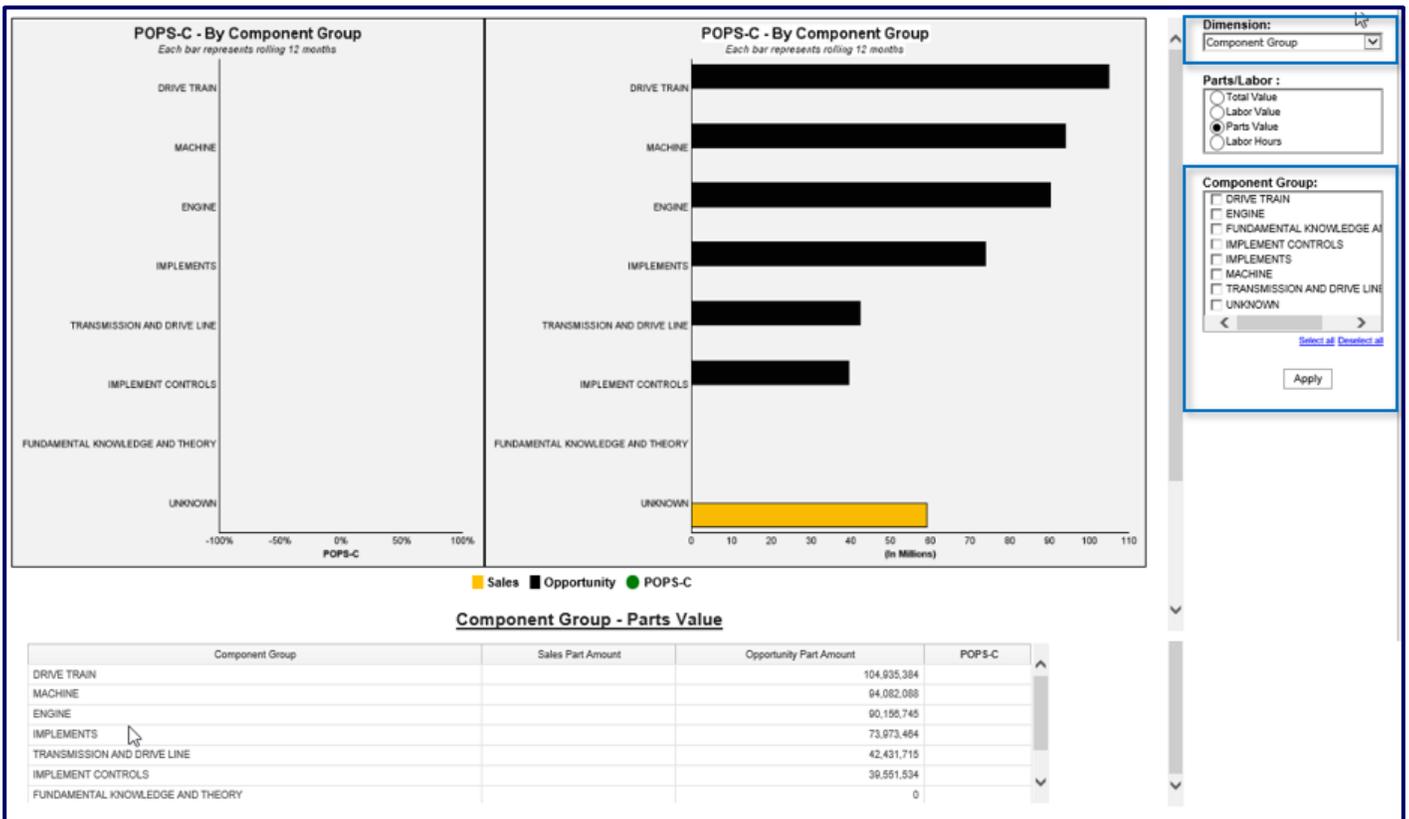
A numeric table view of data is also available utilizing the scroll bar to view values available below the graphical display. Multiple views are also available to export through the export to excel feature.



Dimensions

Users can also select different dimensions on the dimension drop down menu (located within the By Dimension tab) to generate reports that update the look of the visual graph. An option to add additional component group specifications is also available. The following illustration showcases a component group level view of the dimension with the option to delve deeper into specific component groups that a user can select. The image below showcases all component groups with none that have been specifically selected.

The scrolling feature also offers the numeric table view of values with the ability to export to excel as cited on [page 199](#).



Parts Major Class

Shows the past two rolling 12 months views of data specified by Major Class and organized by Major Class Number. Difference between both graphs shows the change between the past two rolling 12 months. POPS-C metric is in its own graph, separate from but next to Sales and Opportunity.

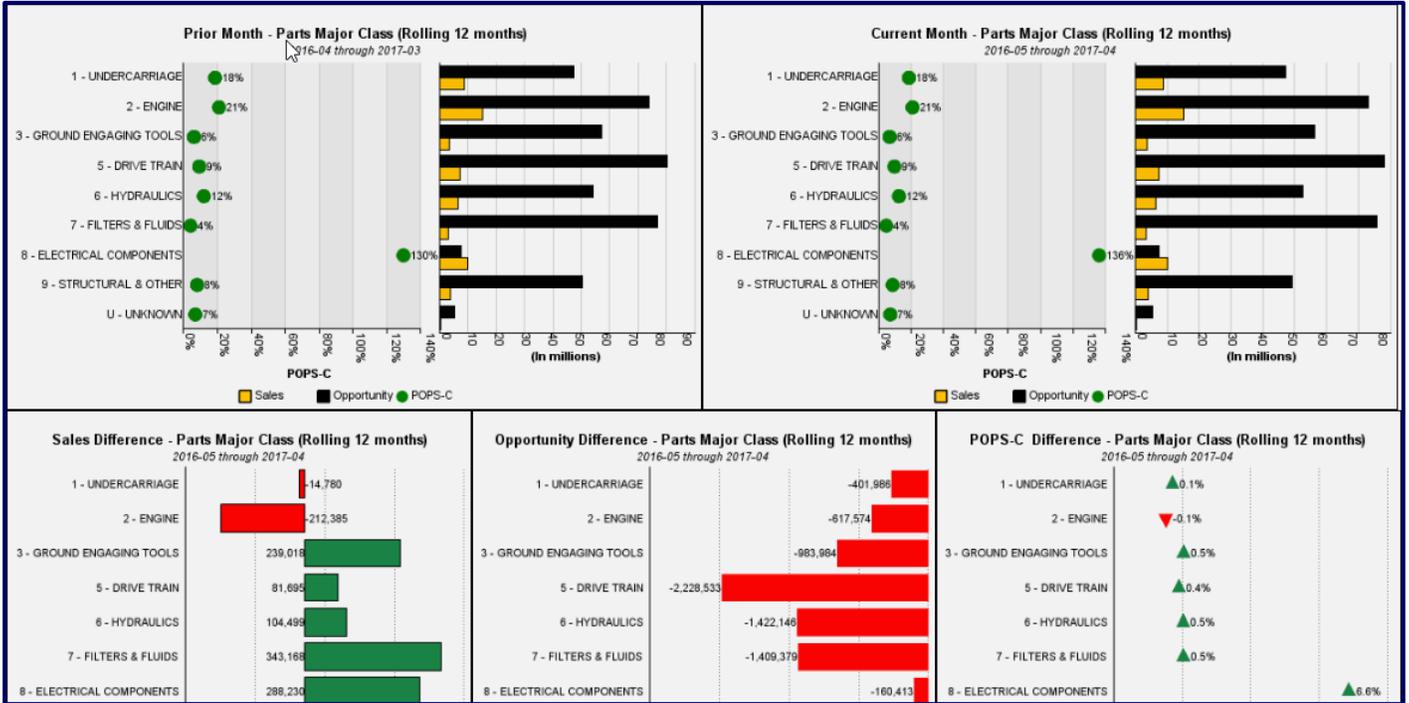
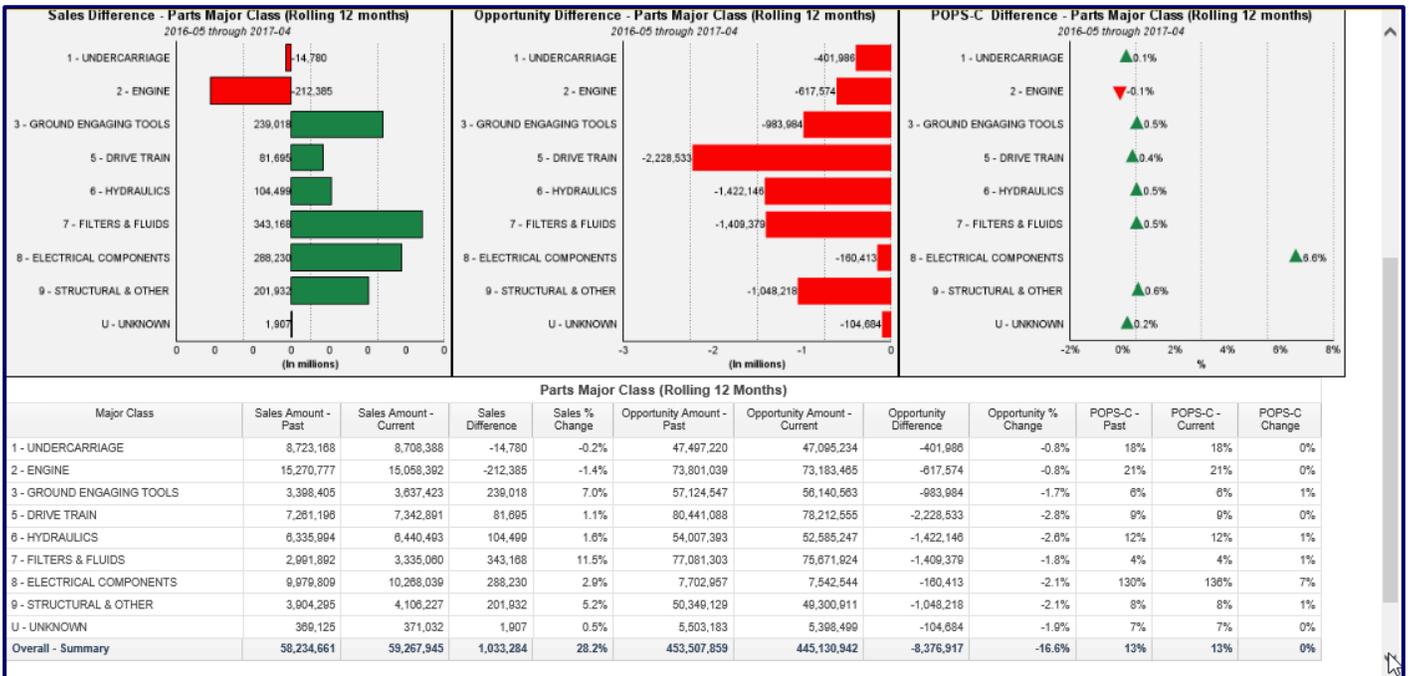


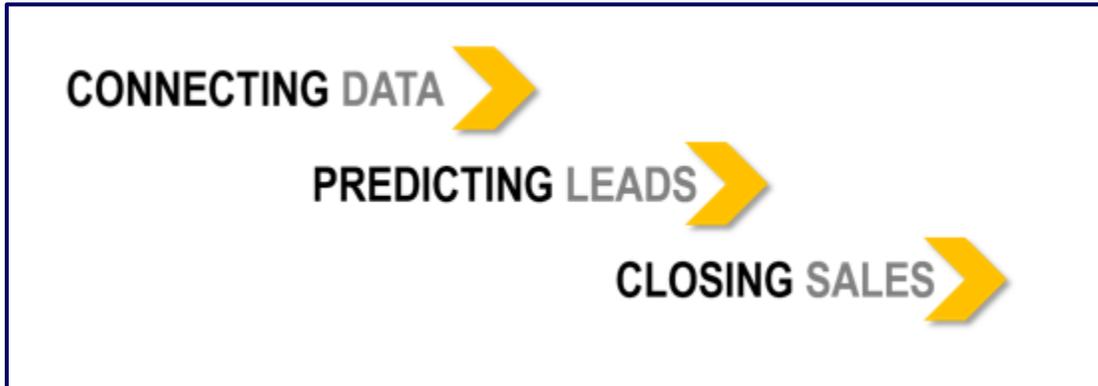
Table View

A numeric table view of data is also available utilizing the scroll bar to view values available below the graphical display. Multiple views are also available to export through the export to excel feature.



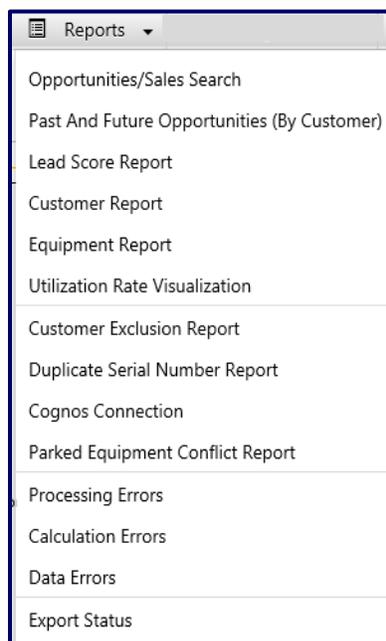
4.2.1.2 If the user does **not** have OLGA COGNOS access...

If the user does ***not*** have OLGA COGNOS, then they will see a generic home page.



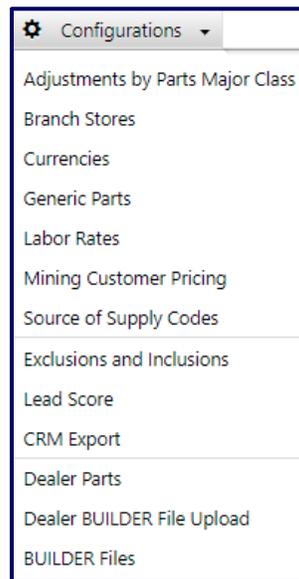
4.2.2 Reports Tab

The Reports tab includes links to the major reports Opportunities/Sales Search, Past and Future Opportunities (By Customer), the Customer Exclusion, Duplicate Serial Number and Parked Equipment Conflict Reports. It also includes error reports for Processing, Calculation, & Data. Lead Score, Customer and Equipment reports are also offered. Users can access Utilization Rate Visualization or Cognos via the Reports tab. Lastly, it includes the holding page for downloaded items in the Export Status page.



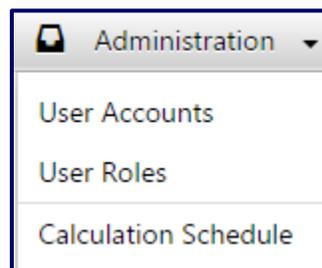
4.2.3 Configurations Tab

The Configurations tab includes links to configurable elements by types: Adjustments by Parts Major Class, Branch Stores, Currencies, Generic Parts, Labor Rates, and Source of Supply Codes. It also includes the setup for Exclusions/Inclusions. It includes the CRM Export option, Dealer Parts, upload for Dealer BUILDER files, and BUILDER files view.



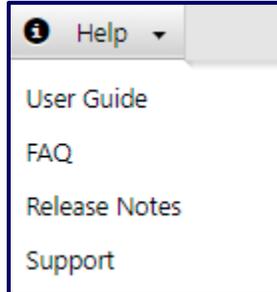
4.2.4 Administration Tab

The Administration tab includes links to the User Accounts, User Roles, and Calculation Schedule pages.



4.2.5 Help Tab

The Help tab includes links to the User Guides, FAQs document, the latest Release Notes, and Support information.



4.2.6 Updates/Alerts Tab

The Updates/Alerts tab shows messages from the OLGA Central Team concerning upcoming releases, outages, and other important topics. Messages are seen by all OLGA web application users. This tab also shows expiration details for Configurations, which are only visible to users in the DEALER_ADMIN role.



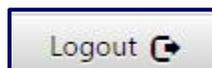
Messages

- The OLGA 3.1 release will be occur on 7 November 2016.

Configuration Expired or Soon Expiring	Number Of Expired/Expiring Records
Adjustments by Parts Major Class	6
Generic Parts	18
Default Hourly Labor Rate	1
Customer Range Exclusions	2
Store Number Exclusions	1
County/State Exclusions	2
Customer Location Exclusions	5
Serial Number Exclusions	1
Equipment Territory	1

4.2.7 Logout Tab

The Logout tab allows a user to log out of the OLGA application.



4.3 Reports

4.3.1 Sorting

The user is able to sort by any column with data in the reports. The report default sort is descending in order on total value. When a user selects a column, it will be sorted in ascending order. If the column is selected a second time, then it will be sorted in descending order. To sort, click on the column heading name containing data.

4.3.2 Opportunities/Sales Search Report

The Opportunities/Sales Search report displays, in separate tabs, the sales and opportunity detail data. Prior to generating the report, the user can apply data filters depending on the information they are interested in viewing, and select a time period during which the sales and/or opportunities occur.

By selecting “Generate Report,” Dealer can view report based on filter selection. If no filters are selected, all available data will be generated. A generated report will show each row as a separate opportunity on the opportunity tab and a separate sale on the sales tab.

Note: All Report data will display only the Customer and Equipment information that is associated to the Sales Reps identified during the Admin → Add User process.

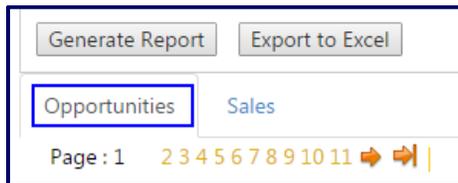
4.3.2.1 Opportunity Tab

Labor hours are based on the hours identified in the BUILDER file. Labor value is based on the labor rate in the OLGA configuration

The Opportunity tab displays:

- The total of the report on the first line
- The customer, serial number, model and industry vertical and industry, sales rep number, sales rep name, and sales rep type
- The SMU, monthly utilization rate, utilization type, last reported SMU, target SMU and Target SMU date
- Builder file type
- The details of the opportunity event – component code, job code, modifier code, work application code, component quantity, next interval

- The value of the opportunity event – next interval, labor hours, labor value, part value, total opportunity value.



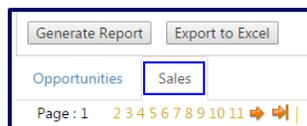
Customer Name	Customer Number	Serial Number	Model	Industry Vertical	Industry	Sales Rep Number	Sales Rep Name	Sales Rep Type	SMU	Monthly Utilization	Utilization Type	Last Reported SMU	Last Reported SMU Date				
BUILDER Type	Component Code	Job Code	Modifier Code	Work App Code	Comp Qty	Target SMU	Target Date	Next Interval	Labor Hours	Labor Value	Part Value	Total Value	Lead Score	Confidence Index (%)	Contract	BUILDER Info	Match Type

4.3.2.2 Sales Tab

The “Labor Hours” and “Labor Value” columns in Sales tab reflect the percent billed to customer for labor. On the home page display, only the labor hours billed will calculate the POLS (hours) data for the last 12 months.

The Sales tab displays:

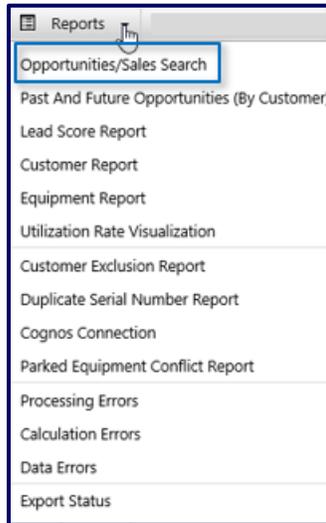
- The total of the report on the first line
- The customer name and number, Industry Vertical and Industry
- Work order
- Segment
- Invoice number, invoice date and the details for each invoice (labor hours, total labor value, parts value, total parts and labor value)
- Serial Number
- Invoice with Work Order details
- Match Type
- The work order details (if applicable)
- Whether a contract is in place



Customer Name ▲▼	Customer Number ▲▼	Industry Vertical ▲▼	Industry ▲▼	Work Order ▲▼	Segment ▲▼	Invoice Number ▲▼	Invoice Date ▲▼	Serial Number ▲▼	Make ▲▼	Model ▲▼	Service Meter ▲▼	SMU Date ▲▼
Component Code ▲▼	Job Code ▲▼	Modifier Code ▲▼	Labor Hours ▲▼	Labor Value ▲▼	Part Value ▲▼	Total Value ▲▼	Contract ▲▼	Invoice/WO	Match Type			

4.3.2.3 How to Use the Opportunity Data in the Opportunities/Sales Search Report

1) In the OLGA web application, navigate to the Reports → Opportunities/Sales Search Report



2) Apply any filter.

Opportunities/Sales Search

Filters

Customer

Customer: -- Select -- Division: -- Select -- Industry Vertical: -- Select -- Customer Industry: -- Select -- Sales Rep: -- Select -- Product Support Segmentation: -- Select --

Product

Product Family: -- Select -- Model: -- Select -- S/N Prefix: -- Select -- Serial Number: -- Select -- Principle Work Code: -- Select -- Application Code: -- Select -- Contract: -- Select --

Opportunity/Sales Event

Component Group Code: -- Select -- Component Sub Group Code: -- Select -- Component Code: -- Select -- Job Code: -- Select -- Parts Major Class: -- Select -- Commercial Group: -- Select -- Match Type: -- Select --

Utilization Type: -- Select -- Invoice Number: -- Select -- Lead Score: Min: [] To: [] Confidence Index (%): Min: [] To: []

Location

State: -- Select -- County: -- Select -- Branch: -- Select -- Territory Dealer Code: -- Select --

Date Range: 08/01/2018 To 08/01/2022

Generate Report Export to Excel

- a. If no filters are needed, the complete data set will be returned.
- b. Product Support Segments are calculated at the customer and division level:
 - i. Do It Myself (DIM) = <30% POLS
 - ii. Work With Me (WWM) = 31-70% POLS
 - iii. Do It For Me (DIFM) = 71+% POLS
- c. Lead Score and Confidence Index filters work using Minimum-Maximum Ranges
 - i. Lead Score → Enter an amount for the lead score range
 - 1. Options: Min, Max, 0-15
 - ii. Confidence Index → Enter an amount for the confidence index range
 - 1. Options: Min, Max, 30-100
- d. Filter boxes that have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.



Best Practice: Filter boxes that have only a small number of options, (e.g. Parts Major Class) will show all the options in the filter box.

The user can select from the displayed options. Filter boxes that have numerous options, (e.g. Customer) will not display all the options. The user should search for the customer by typing at least 3 characters of the customer's name or number and then selecting the search button.

This will return all of the options that match the search criteria, from which the user can make the required selections. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

3) Select the date range.

Date Range

From 02/01/2013 To 02/01/2019

Generate Report Export to Excel

4) Select, “Generate Report” and then navigate to the Opportunities tab.

Date Range

From 02/01/2013 To 02/01/2019

Generate Report Export to Excel

Opportunities Sales

Page : 1 2 3 4 5 6 7 8 9 10 11 Total Record(s) : 1,184,710

5) Review the data.

6) If required, export the data to Excel.

- a. You can choose to name the file yourself or use the default naming.

Date Range

From 02/01/2013 To 02/01/2019

Generate Report Export to Excel

Opportunities Sales

Page : 1 2 3 4 5 6 7 8 9 10 11 Total Record(s) : 1,184,710

Note: The user does not have to generate the report before exporting it to Excel. The data exported to Excel will be the full report.

We suggest to first generate the report prior to creating an export to verify what will be exported. Then the data exported to Excel will reflect the filters applied and the metric selected.

4.3.2.4 Opportunities/Sales Search Report: Points of Consideration

Points to consider when reviewing data:

- Each row constitutes one sales event (invoice) on the Opportunities tab.
- Each row constitutes one sales event (invoice) on Sales tab.
- Each row applies to only one customer.
- The same customer can have multiple invoices in the selected time period (multiple rows) on the Sales tab.
- The serial number is only shown if it was recorded on the invoice.
- The work order number is only shown if the invoice was for a work order. Over-the-counter parts sales will not have a work order number.
- The parts and labor sales values are read from the Dealer's invoice data sent to Caterpillar.
- The Contract column flags whether or not a CSA contract is in place for the unit.
- The Details pop up window displays the invoice and work order (if applicable) details for the selected sales event.

Note: The more invoices the Dealer records a serial number on, the more useful the data. Capturing serial numbers on invoices will allow more accurate POPS and POLS calculations at the serial number level.



Best Practice: Data can become more useful when there are more invoices and Dealer records for each serial number. Capturing serial numbers on invoices will allow more accurate POPS and POLS calculations at the serial number level.

4.3.2.5 BUILDER File Details

The BUILDER file information is used for calculating the opportunity and shows the “Details” linked to the Opportunity/Sales Report being generated. By selecting a BUILDER file details link, the following information is given.

- **BUILDER Info** – Descriptors on the BUILDER file
- **Opportunity Summary** - Total parts and labor value for the opportunities including a before failure repair, an after failure repair, and a remove and an install option, are shown as one option.
- **Included Repair Options** – Repair option details and individual part repair options that makes up one total repair.
- **Repair Option Part** – List of parts for this repair option.

BUILDER File Details include:

- Customer Number → Sent by Dealer
- Customer Name → Sent by Dealer
- Serial Number → Sent by Dealer
- Model → Derived from Caterpillar master tables
- SMU → Current SMU for equipment derived from Caterpillar calculation
- Utilization Rate → Current Monthly Utilization Rate for equipment derived from Caterpillar calculation
- BUILDER Type:
 - Dealer = Dealer uploaded BUILDER file
 - Cat = Cat standard BUILDER file
 - Generic 1 = Copied from a Cat file within the same model and series
 - Example: 793F copied to another 793F
 - Generic 2 = Copied from a Cat file within the same model but across series
 - Example: 793D copied to a 793B
- BUILDER File Information
 - Comp Code, Job Code, Work Application Code, Component Quantity, Target SMU, Target Date, Next Interval, Labor Hours, Arrangement Number (engines)
- Labor Value → Labor hours multiplied by labor rate identified in configuration
- Part Value → Caterpillar suggested consumer list adjusted by major class (where applicable) and generic parts
- Total Value → Labor value added to part value
- CSA → Indicates if equipment is under contract for during the target date of the opportunity
- Opportunity Status → future functionality to mark opportunities as complete
- BUILDER Info → Detailed BUILDER information used to derive opportunity

All new files in ServiceData.cat.com are updated monthly to the OLGA BUILDER files. Updates include: the authoring of new files, updates to existing files, cancel/replace by parts list, updates to any old PNs, and GET repair options.

4.3.3 Past and Future Opportunities (By Customer) Report

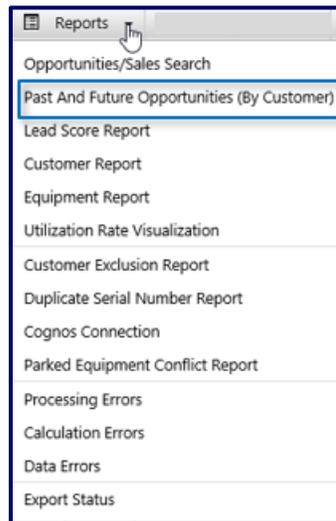
The Past and Future Opportunities (By Customer) report displays the summary of customer level data. Prior to generating the report, the user can select to display data for Parts, Labor, Parts + Labor or Labor Hours. The user can also apply any applicable data filters depending on the data they are interested in viewing. All Report data will display only the Customer and Equipment information that is associated to the Sales Reps identified during the *Admin* → *Add User* process.

The report displays:

- The total of the report on the first line
- Sales, opportunity and POPS/POLS/% of parts and labor/POLS Hours (depending on selection) for the past 12 months.
- The value of the customer's opportunities forecast for each of the next 12 months
- The number of repair events forecast for each of the next 12 months
- The value of the customer's opportunities forecast for the 2nd and 3rd year ahead
- The number of repair events forecast for the 2nd and 3rd year ahead.
- The Total row at the top of the table summarizes the data for the Dealer's entire customer base that are included in OLGA (after customer and equipment exclusions are applied).

4.3.3.1 How to Use the Past and Future Opportunities (By Customer) Report

- 1) In the OLGA web application, navigate to the Reports → Past and Future Opportunities (By Customer).



- 2) Apply any required filters.
 - a. If no filters are applied, the complete data-set will be returned.
 - b. Filter boxes have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

Past And Future Opportunities (By Customer)

Filters

Customer

Customer: -- Select -- Division: -- Select -- Industry Vertical: -- Select -- Customer Industry: -- Select -- Sales Rep: -- Select -- Product Support Segmentation: -- Select --

Product

Product Family: -- Select -- Model: -- Select -- S/N Prefix: -- Select -- Serial Number: -- Select -- Principle Work Code: -- Select -- Application Code: -- Select --

Contract: -- Select --

Opportunity/Sales Event

Component Group Code: -- Select -- Component Sub Group Code: -- Select -- Component Code: -- Select -- Job Code: -- Select -- Parts Major Class: -- Select -- Commercial Group: -- Select --

Match Type: -- Select -- Utilization Type: -- Select --

Location

State: -- Select -- County: -- Select -- Branch: -- Select -- Territory Dealer Code: -- Select --

Parts/Labor: Parts Labor Total Labor Hours

3) Select the metric to show either Parts, Labor, Parts + Labor or Labor Hours

Parts/Labor: Parts Labor Total Labor Hours

4) Select “Generate Report” or “Export to Excel”

- a. If exporting to Excel, you can choose to name the file yourself or use the default naming.

Page: 1 2 3 4 5 6 7 8 9 10 | Total Record(s) :33,644 | Show 100 Records |

Customer Name	Customer Number	# of Units	Previous 12 Months				12 Month Period (Opportunity Value/Number of Events)												Total	2 Year	3 Year
			Sales Value	Opp Value	Total %		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan			
Total		29,952	91,164,300 143,010	390,906,490	23.3	31,650,610 17,857	34,313,506 19,402	29,537,102 18,360	33,357,792 19,760	32,866,595 18,434	35,795,739 19,633	33,220,461 19,065	38,088,427 19,545	31,434,462 19,126	30,850,026 18,794	34,425,844 19,071	33,509,703 19,435	399,050,267 228,482	405,932,713 229,439	411,030,266 231,736	
Customer 012174	012174	122	4,456,191 4,339	12,766,427	34.9	1,584,825 331	2,321,739 406	769,412 268	1,324,273 316	1,119,818 325	1,126,323 309	622,769 252	742,055 271	708,815 279	1,189,976 273	728,949 276	1,116,817 336	13,355,770 3,642	12,386,342 3,446	13,468,786 3,683	
Customer 012174	012174	122	4,456,191 4,339	12,766,427	34.9	1,584,825 331	2,321,739 406	769,412 268	1,324,273 316	1,119,818 325	1,126,323 309	622,769 252	742,055 271	708,815 279	1,189,976 273	728,949 276	1,116,817 336	13,355,770 3,642	12,386,342 3,446	13,468,786 3,683	
Lara Stejn	L50001	200	5,199,745 5,343	11,642,113	44.7	1,286,822 382	1,126,407 337	634,417 297	706,066 297	676,906 309	1,760,729 447	715,046 275	1,229,096 424	629,250 292	796,065 280	1,616,272 372	1,239,452 355	12,416,527 4,067	11,790,129 3,798	12,403,556 3,895	
Customer 075144	075144	65	632,011 387	8,031,891	7.9	1,481,275 250	253,274 128	356,043 149	904,058 234	549,663 170	946,267 240	1,390,480 269	709,950 187	1,575,817 275	499,627 155	1,068,209 295	380,666 178	10,115,329 2,530	8,492,781 2,447	8,799,911 2,496	
Customer 008794	008794	88	1,119,639 1,526	8,508,070	13.2	761,270 234	1,241,531 249	825,650 243	380,576 196	928,571 261	444,458 206	588,748 184	1,075,010 266	696,314 254	483,177 220	785,069 256	1,117,575 257	9,327,977 2,826	8,878,242 2,803	9,122,705 2,787	
Customer 028341G	028341G	33	274,099 296	7,215,820	3.8	530,284 114	1,296,741 196	894,319 174	531,943 147	771,553 148	256,888 111	533,952 131	1,360,278 241	215,103 109	343,754 147	717,182 167	156,473 95	7,608,269 1,780	6,335,812 1,799	5,570,765 1,711	

Note: The user does not have to generate the report before exporting it to Excel. The data exported to Excel will be the full report.

We suggest to first generate the report prior to creating an export to verify what will be exported. Then the data exported to Excel will reflect the filters applied and the metric selected.

4.3.3.2 Past and Future Opportunities (By Customer) Report: Points of Consideration

Points to consider when reviewing Past and Future Opportunities Report data:

- The number of units reflects the customer’s number of Cat equipment units.
- The column after Opportunity Value will reflect the metric selected – POPS, POLS, Total % or POLS Hours.
- Within each cell of the table, the blue hyperlinked value is the value of the sales total or opportunity total.
- Within each cell of the table, the black value underneath the blue hyperlinked value is the number of sales events or opportunity (repair) events.
- Clicking on any of the hyperlinked sales or opportunity values will open the Opportunity/Sales Search report (see **Section 4.3.2 Opportunities/Sales Search Report**), filtered to the customer and the time period.
- The user can sort by any column within the table by clicking on the column heading. Clicking once will sort the data in ascending order. Clicking a second time will sort the data in descending order.
- If the months shown are June 2015 through to May 2016 as an example, the column titled “2 Year” means June 2016 – May 2017 and the column titled “3 Year” means June 2017 – May 2018.

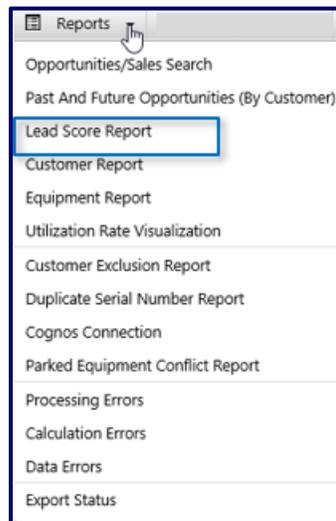
4.3.4 Lead Score Report

The Lead Score Report is a simplified version of the Opportunities/Sales Search Report. It contains fewer columns, has no sales information, has a shorter default time frame, and emphasizes the Lead Score and Confidence Index by placing them at the beginning of the report. If the user needs more information, they can change the date range or use the Opportunities/Sales Search Report directly.

A lead score and confidence index is calculated for each opportunity covered in the calculation run. For monthly runs, that applies to -1 month and +3 years. For initial runs, it will be applied to all opportunities.

4.3.2.3 How to Use the Lead Score Report

- 1) In the OLGA web application, navigate to the Reports → Lead Score Report



- 2) Apply any filter.
 - a. If no filters are needed, the complete data set will be returned.

Lead Score Report

Filters

Customer

Customer: -- Select -- Division: -- Select -- Industry Vertical: -- Select -- Customer Industry: -- Select -- Sales Rep: -- Select -- Product Support Segmentation: -- Select --

Product

Product Family: -- Select -- Model: -- Select -- S/N Prefix: -- Select -- Serial Number: -- Select -- Principle Work Code: -- Select -- Application Code: -- Select --

Opportunity Event

Component Group Code: -- Select -- Component Sub Group Code: -- Select -- Component Code: -- Select -- Job Code: -- Select -- Utilization Type: -- Select -- Lead Score: Min To Max

Confidence Index (%) Min To Max

Location

State: -- Select -- County: -- Select -- Branch: -- Select -- Territory Dealer Code: -- Select --

Date Range: 03/01/2017 To 10/01/2017

Generate Report Export to Excel

- b. Lead Score and Confidence Index filters work using Minimum-Maximum Ranges
 - i. Lead Score → Enter an amount for the lead score range
 - 1. Options: Min, Max, 0-15
 - ii. Confidence Index → Enter an amount for the confidence index range
 - 1. Options: Min, Max, 30-100
- c. Filter boxes that have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

Best Practice: Filter boxes that have only a small number of options, (e.g. Parts Major Class) will show all the options in the filter box.

The user can select from the displayed options. Filter boxes that have numerous options, (e.g. Customer) will not display all the options. The user should search for the customer by typing at least 3 characters of the customer's name or number and then selecting the search button.

This will return all of the options that match the search criteria, from which the user can make the required selections. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

- 3) Select the date range.
 - a. Default: Previous 1 month and forward 6 months

- 4) Select "Generate Report".

- 5) Review the data.

Lead Score Report

Filters

Generate Report Export to Excel

Page: 1 2 3 4 5 6 7 8 9 10 11 | Total Record(s): 180,288 Show 100 Records

Lead Score	Confidence Index (%)	Customer Name	Customer Number	Serial Number	Model	Industry Vertical	Industry	Sales Rep Number	Sales Rep Name	Component Code	Job Code	Modifier Code	Target SMU	Target Date	SMU	Monthly Utilization	Labor Value	Part Value	Total Value	SOS Severity	Contract
Total																	101,484,082	247,872,596	349,356,678		
15	100	Customer: 003051	003051	7PZ01475	D11R	UNK	UNK			1000 - ENGINE	513 - REPLACE WITH CAT REMAN	-	42,000	04/14/2017	53,711	435	11,567	148,701	160,268	Red	Contract
15	100	Customer: 015743	015743	01X01953	769C	CI	QA40	344	SalesRep	1000 - ENGINE	020 - RECONDITION	-	60,000	09/24/2017	62,438	114	15,570	23,437	39,007	Red	Contract
15	100	Customer: 003051	003051	86G00326	973	UNK	UNK			1000 - ENGINE	020 - RECONDITION	-	20,000	09/24/2017	26,285	293	8,880	20,504	29,384	Red	Contract
15	100	Customer: 003051	003051	K0S01839	939C	UNK	UNK			4050 - FINAL DRIVE	020 - RECONDITION	-	7,500	05/09/2017	9,842	90	2,200	6,397	8,597	Red	Contract
15	100	Customer: 039620	039620	R9H00432	16M	CI	EQ10	233	SalesRep	S265 - ARTICULATION CYLINDER	020 - RECONDITION	ZL - LEFT SIDE	16,000	10/30/2017	19,205	158	1,000	2,282	3,282	Red	Contract
15	100	Customer: 039620	039620	R9H00432	16M	CI	EQ10	233	SalesRep	S265 - ARTICULATION CYLINDER	020 - RECONDITION	QS - RIGHT SIDE	16,000	10/30/2017	19,205	158	1,000	2,282	3,282	Red	Contract
15	100	Customer: 039620	039620	R9H00432	16M	CI	EQ10	233	SalesRep	S229 - BLADE SIDESHIFT CYLINDER	020 - RECONDITION	-	16,000	10/30/2017	19,205	158	1,000	1,562	2,562	Red	Contract

- 6) If required, export the data to Excel.
 - a. You can choose to name the file yourself or use the default naming.

Note: The user does not have to generate the report before exporting it to Excel. The data exported to Excel will be the full report.

We suggest to first generate the report prior to creating an export to verify what will be exported. Then the data exported to Excel will reflect the filters applied and the metric selected.

4.3.5 Customer Report

The Customer Report displays summary information by customer account including:

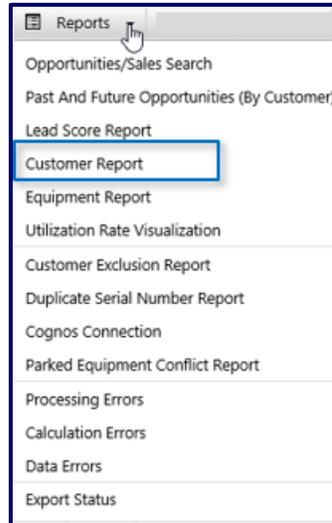
- General customer information
- Division details
- Parent-child relationship
- POPS & POLS
- Opportunities summary
- Equipment summary

This report allows users to see a summarized information about an individual customer in preparation for a customer visit, planning session, general discussion, etc. This report shows one consolidated view by customer account number.

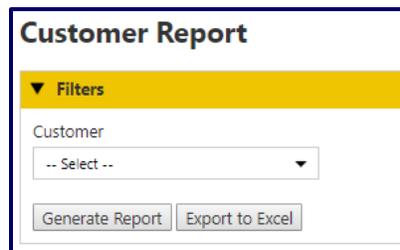
Note: Some sections show only a subset of opportunity or equipment, and can be linked to additional information in other system reports.

4.3.5.1 How to Use the Customer Report

- 1) In the OLGA web application, navigate to the Reports → Customer Report



- 2) Apply the specific required filter on Customer
 - a. The filter is required in this report.
 - b. The user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.



- 3) Generate Report
- 4) Review Results

Customer Report

▼ **Filters**

Customer
012174 - Customer 012174 ▼

Generate Report Export to Excel

▶ **Customer Information**

▶ **Division Details**

▶ **Parent-Child Relationship**

▶ **POPS and POLS**

▶ **Opportunities Summary - Top 50 By Value**

▶ **Equipment**

4.3.5.2 Customer Information

This section shows customer indicative data, including whether the customer is Active in OLGA (e.g. Included in the opportunity calculation). This is the information by which customers can be Excluded in OLGA.

Indicative data includes:

- Customer Name
- Customer Number
- Active Customer
- Customer Type
- Primary Store
- Key CAT Account
- Territory Dealer Code
- Location Information (ex: City, State, Postal Code, Country)

Customer Information

- **Customer Name:** Customer 012174
- **Customer Number:** 012174
- **Active Customer:** True
- **Customer Type:** R - Revenue Account (end customer)
- **Primary Store:** 00 -
- **Key CAT Account:**
- **Territory Dealer Code:** TD11
- **City:** Seattle
- **County:**
- **State:** WA
- **Postal Code:** 99999
- **Country:** USA
- **Customer Location:**

4.3.5.3 Division Details

This section shows a list of each customer division which have ever been defined by the dealer for that customer since the latest Initial Calculation Run. All divisions are displayed even if it is a division that has always been Excluded. Inclusion/Exclusion details are listed by division, including the month of Exclusion where applicable. Related details on primary industry, sales rep, sales rep type, and product support segmentation are also included.

Division Details

Division	Current EOM Exclusion Status	Month Excluded	Primary Industry	Primary Sales Rep Name	Primary Sales Rep Number	Sales Rep Type	Product Support Segmentation
B - DIVISION B	Included		MINING - MN10 - COAL MINING - SURFACE	SalesRep	364	Product Support	DIM - 0-30% POLS
C - CONSTRUCTION	Included		MINING - MN10 - COAL MINING - SURFACE	SalesRep	364	Product Support	Unknown
D -	Excluded	Apr 2018					Unknown
E - DIVISION E	Included		MINING - MN10 - COAL MINING - SURFACE	SalesRep	369	Product Support	DIM - 0-30% POLS
G - DIVISION G	Included		MINING - MN10 - COAL MINING - SURFACE	SalesRep	301	Product Support	Unknown
R - DIVISION R	Included		MINING - MN10 - COAL MINING - SURFACE				DIM - 0-30% POLS
T - ENGINE - TRUCK	Excluded	Apr 2018	MINING - MN10 - COAL MINING - SURFACE	SalesRep	900	Product Support	Unknown
U - DIVISION U	Included		MINING - MN10 - COAL MINING - SURFACE				Unknown

4.3.5.4 Parent-Child Relationship

This section shows the applicable parent-child relationship or hierarchy from the level of the customer account you are currently viewing. This section will only show if a customer account has a parent or a child. It will not show grandparents. However, it will always show all children and subsequent lower relationships.

- If there is a blue hyperlink:
 - You can click the link and the system will open a new tab. This will take you to the Customer Report and show the specific information for that customer account.
- If there is no hyperlink:

- One of three scenarios are present:
 - The customer has never been Included in OLGA. There is no information available to display as it has always been Excluded.
 - Your user role does not allow access to that customer account.
 - Your user role does not allow access to the Customer Report.

▼ **Parent-Child Relationship**

Parent: *No Parent*

↳ **Customer:** 012174-Customer 012174

Note: If there is a circular issue in a hierarchy relationship, then the system will show an error message. If such a circular relationship exists, the system treats it as a broken relationship and does not display that relationship.

4.3.5.5 POPS and POLS

This section shows the sales, opportunity, and POPS/POLS value by parts major class for the selected customer account.

▼ POPS and POLS			
Major Class	Sales Value	Opportunity Value	Percent (%)
1 - Undercarriage	272,822	1,260,701	21.6%
2 - Engine	216,293	1,148,855	18.8%
3 - Ground Engaging Tools	188,997	1,061,587	17.8%
5 - Drive Train Parts	150,037	2,657,357	5.6%
6 - Hydraulics	339,684	688,036	49.4%
7 - Filters	121,410	1,418,203	8.6%
8 - Maintenance	383,306	76,194	503.1%
9 - Structural	173,407	1,137,211	15.2%
10 - Unknown	194	48,567	0.4%
POPS	1,846,150	9,496,712	19.4%
POLS	775,646	2,027,350	38.3%
Total	2,621,797	11,524,061	22.8%

4.3.5.6 Opportunities Summary

This section shows the top 50 opportunity events by total value projected over the next 12 months for the selected customer account. These opportunity events are only for Included customers and equipment, and the opportunities belong to equipment mapped to divisions that the user has access to view.

The 50 Opportunities will be sorted by the max total value (Labor +Parts Value), ordered in descending total value. Clicking on any other column header will cause the sorting to change according to the values in this column.

There is a hyperlink to the Opportunities/Sales Search Report called *View All Opportunities for Next 12 Months*. Clicking this link will maintain the filter parameters from this page – including customer number and date range.

▼ Opportunities Summary - Top 50 By Value											
Date Range: 05/01/2018 To 05/01/2019									View All Opportunities for Next 12 Months		
Page : 1 2 3 4 5 Total Record(s) : 50 Show 10 Records											
Serial Number	Model	Product Family	SMU	Monthly Utilization	Component Code	Utilization Type	Target SMU	Target Date	Labor Value	Part Value	Total Value
APX01083	785C	OFF HIGHWAY TRUCKS	55,291	328	1000 - ENGINE	Actual	54,000	05/11/2018	12,735	215,278	228,013
APX00970	785C	OFF HIGHWAY TRUCKS	52,689	290	1000 - ENGINE	Actual	54,000	01/18/2019	12,735	215,278	228,013
7PZ01179	D11R	TRACK TYPE TRACTORS	55,610	272	1000 - ENGINE	Actual	56,000	10/17/2018	11,567	142,256	153,823
AZX00363	992G	WHEEL LOADERS	53,741	207	1000 - ENGINE	Actual	54,000	10/12/2018	7,100	136,248	143,348
GEB00510	D11T	TRACK TYPE TRACTORS	37,328	265	1000 - ENGINE	Actual	39,000	03/13/2019	11,590	112,516	124,106
Z9K00290	993K	WHEEL LOADERS	43,233	246	1000 - ENGINE	Actual	45,000	04/08/2019	10,190	109,595	119,785
RJG01593	D10T	TRACK TYPE TRACTORS	41,923	327	1000 - ENGINE	Actual	42,000	09/12/2018	9,930	97,288	107,218
APX01083	785C	OFF HIGHWAY TRUCKS	55,291	328	4001 - FINAL DRIVE & BRAKE WHEEL	Actual	54,000	05/11/2018	3,214	68,500	71,714
APX00970	785C	OFF HIGHWAY TRUCKS	52,689	290	4001 - FINAL DRIVE & BRAKE WHEEL	Actual	54,000	01/18/2019	3,214	68,500	71,714
APX00970	785C	OFF HIGHWAY TRUCKS	52,689	290	4001 - FINAL DRIVE & BRAKE WHEEL	Actual	54,000	01/18/2019	3,214	68,500	71,714

4.3.5.7 Equipment

This section shows all equipment with opportunity events for this customer account from the most current calculation run. It will show opportunity events by total value projected over the next 12 months. This section will show both Included and Excluded equipment. If the equipment is listed as Excluded, then no value will be displayed. It also shows out of scope equipment with a 0 or N/A value.

The Total Value numbers show a blue hyperlink. Clicking this link will take you to the Opportunities/Sales Search Report. It will maintain the same filter parameters – including customer number, equipment, and time frame.

Note: Remember, if you are having trouble viewing the information, it is most likely due to a role based restriction such as sales rep or division.

Serial Number	Model	Product Family	SMU	Monthly Utilization	Utilization Type	Last Reported SMU	Principal Work Code-Description	Application Code-Description	Division	Labor Value	Part Value	Total Value	Reason
APX01083	785C	OFF HIGHWAY TRUCKS	55,291	328	Actual	55,072	510 - COAL - SURFACE	2 - Medium	B	85,545	568,280	653,824	
APX00970	785C	OFF HIGHWAY TRUCKS	52,689	290	Actual	51,771	510 - COAL - SURFACE	-	B	78,095	545,591	623,685	
GEB00287	D11T	TRACK TYPE TRACTORS	36,235	258	Actual	35,599	510 - COAL - SURFACE	-	B	52,861	384,878	437,739	
Z9K00290	993K	WHEEL LOADERS	43,233	246	Actual	42,618	510 - COAL - SURFACE	-	B	45,703	363,316	409,019	
Z9K00483	993K	WHEEL LOADERS	25,334	344	Actual	24,680	510 - COAL - SURFACE	-	B	46,575	271,539	318,114	
7PZ01179	D11R	TRACK TYPE TRACTORS	55,610	272	Actual	55,075	510 - COAL - SURFACE	2 - Medium	B	45,506	271,805	317,311	
RJG00576	D10T	TRACK TYPE TRACTORS	58,052	301	Actual	57,210	510 - COAL - SURFACE	2 - Medium	B	44,192	241,684	285,876	
AZX00363	992G	WHEEL LOADERS	53,741	207	Actual	52,837	510 - COAL - SURFACE	2 - Medium	B	34,650	246,451	281,101	
RJG02572	D10T	TRACK TYPE TRACTORS	22,632	221	Actual	22,072	510 - COAL - SURFACE	2 - Medium	B	47,310	223,993	271,303	
RJG01593	D10T	TRACK TYPE TRACTORS	41,923	327	Actual	41,106	510 - COAL - SURFACE	-	B	53,220	216,531	269,751	

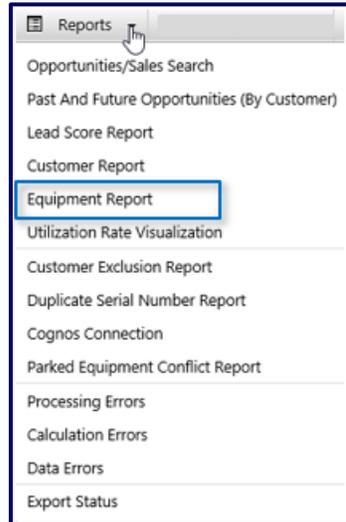
4.3.6 Equipment Report

The Equipment Report displays all equipment from the dealer's Equipment File used in the latest Initial Calculation Run. The report allows users to see all of the equipment the dealer has sent into the CDDW and that OLGA uses to exclude, include, and ultimately calculate opportunity. This equipment report provides a summary of equipment population & its individual equipment status in addition to views of future 12 months' opportunity values. This report can be used to validate the equipment list being sent through OLGA.

Note: OLGA's other reports showing equipment information focus only on Included equipment that falls into the opportunity calculation timeframe of +3/-3 years.

4.3.6.1 How to Use the Equipment Report

 5) In the OLGA web application, navigate to the Reports → Equipment Report



6) Apply any required filters on Customer

- a. If no filters are applied, the complete data-set will be returned.
- b. Filter boxes have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

4.3.6.2 Viewing and Understanding the New Visualizations in OLGA

Dealers will now be able to access the utilization visualizations through the Equipment Report. Each serial number will have a hyperlink on the SMU value that will open a pop up of the visualization. Visualizations are only available for serial numbers that utilize the Actual Utilization Rate Method, Naturally Parked, or Dealer Parked when the serial number has at least 2 SMU points.

Equipment Report

The SMU column will now show blue hyperlinks. The hyperlinks will bring up a pop-up that displays the visualizations if available for that serial number.

Equipment Report

▼ Filters

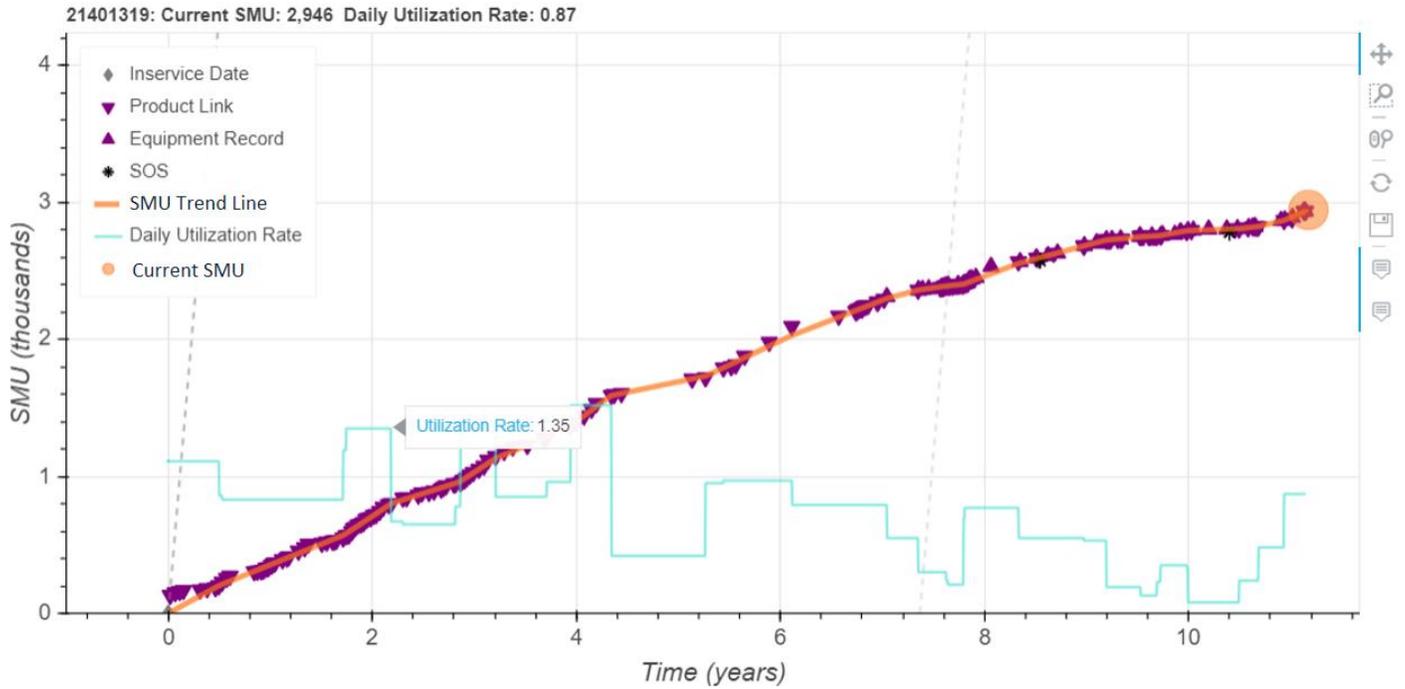
- ▶ Customer
- ▶ Product
- ▶ Opportunity/Sales Event

Generate Report | Export to Excel

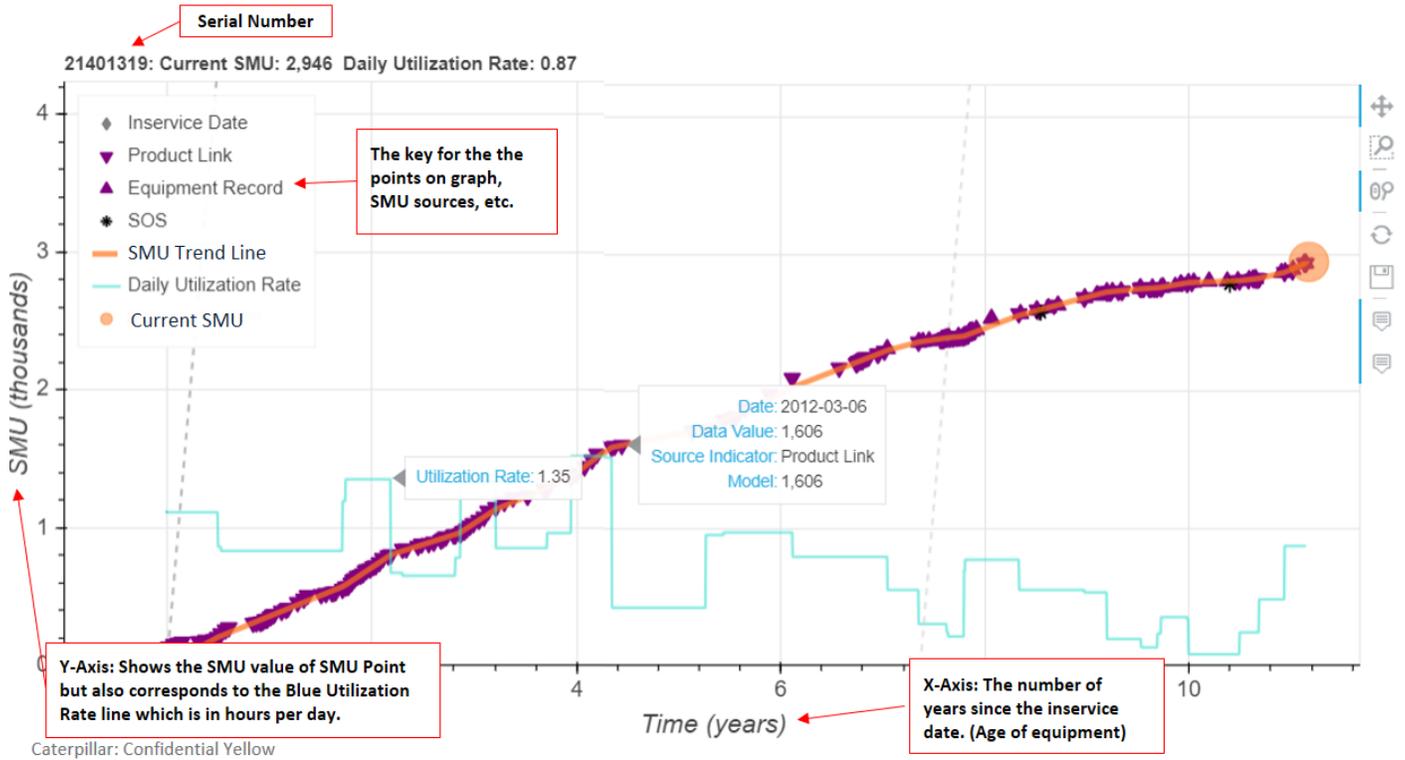
Page : 1 | 2 3 4 5 6 7 8 9 10 11 | Total Record(s) : 56,310 | Show 100 Records

Serial Number	Product Family	Model	Customer Name	Customer Number	Division	Industry Vertical	Industry	Sales Rep Number	Sales Rep Name	Sales Rep Type	Territory Indicator	Current Equipment	Included/ Excluded	Reason For Exclusion	Current Activity Indicator	Parked Status	Parked SMU Date	Parking Dealer Region	Monthly Utilization	SMU Type	Utilization Type	SMU	Last Reported SMU	Last Reported SMU Date
44200313	WHEEL LOADERS	994F	Customer 003051	003051	C	UNK					I - In Territory	YES			A - Active				517	Hour	Actual	34,058	33,761	12/03/2018
44200173	WHEEL LOADERS	994F	Customer 003051	003051	C	UNK					I - In Territory	YES			A - Active				572	Hour	Actual	58,897	58,249	11/16/2018
91YF0029	WHEEL LOADERS	994	Customer 003051	003051		UNK					I - In Territory	YES			A - Active				61	Hour	Actual	41,601	34,950	01/05/2010
44200306	WHEEL LOADERS	994F	Customer 000001A	000001A	C	UNK					I - In Territory	YES			A - Active				398	Hour	Actual	29,814	29,522	11/28/2018
APX00192	OFF HIGHWAY TRUCKS	785C	Customer 003051	003051	C	UNK					X - Unknown	YES			A - Active				623	Hour	Actual	127,140	124,835	08/31/2018
9TR00366	TRACK TYPE TRACTORS	D11R	Customer 003051	003051	C	UNK					I - In Territory	YES			A - Active				528	Hour	Actual	100,001	43,599	03/11/2010

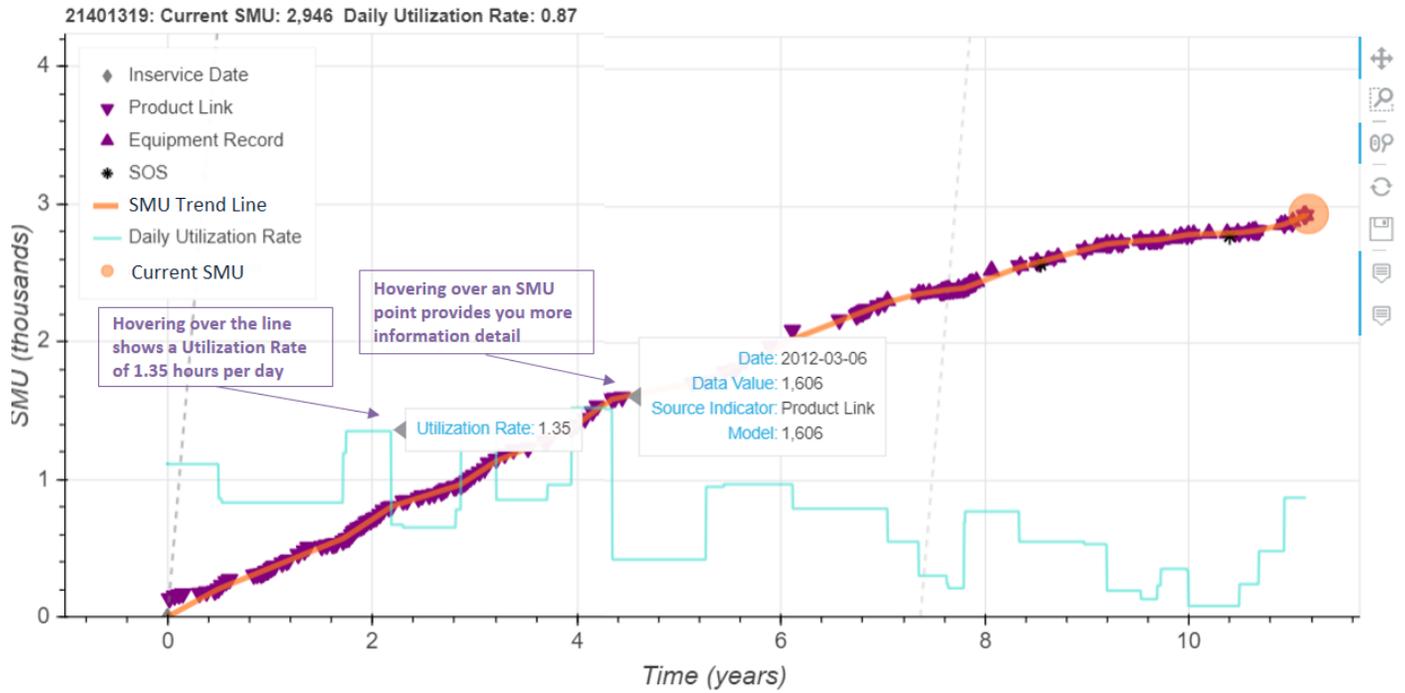
Visualization 1 – Functionality:



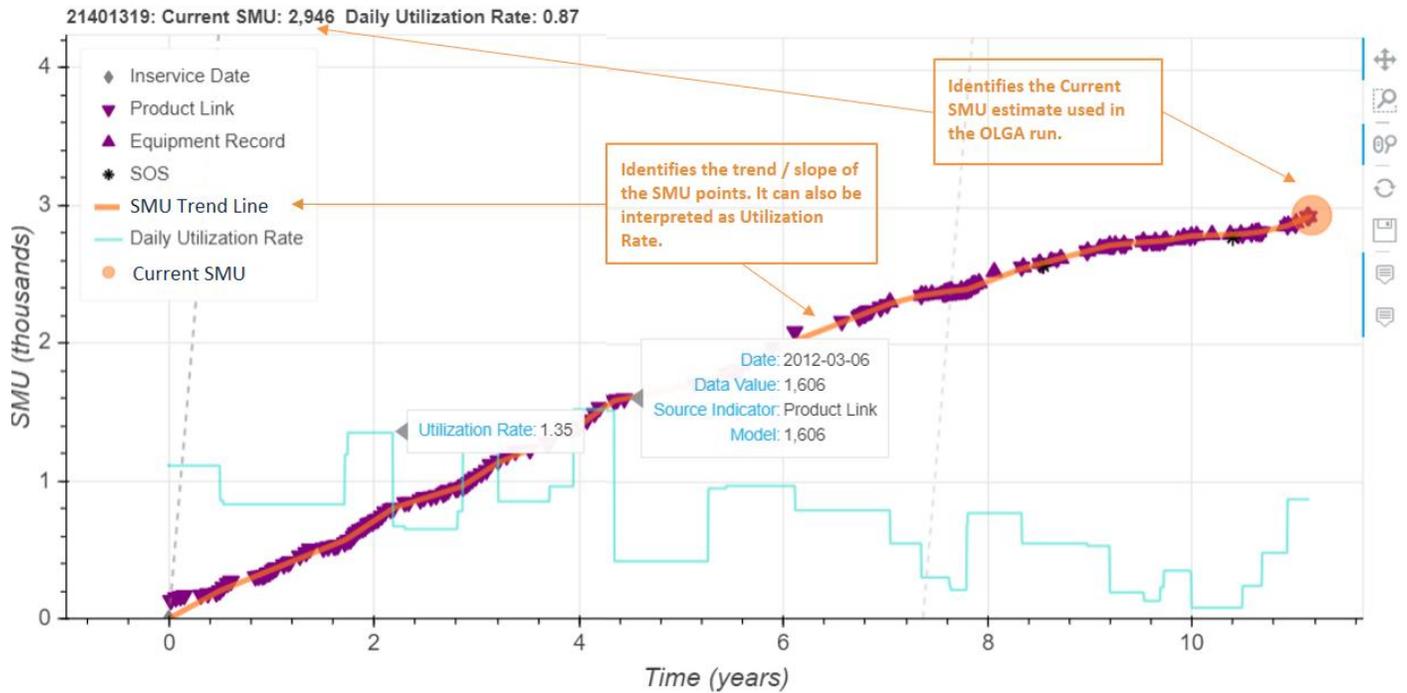
Visualization 1 – Functionality:



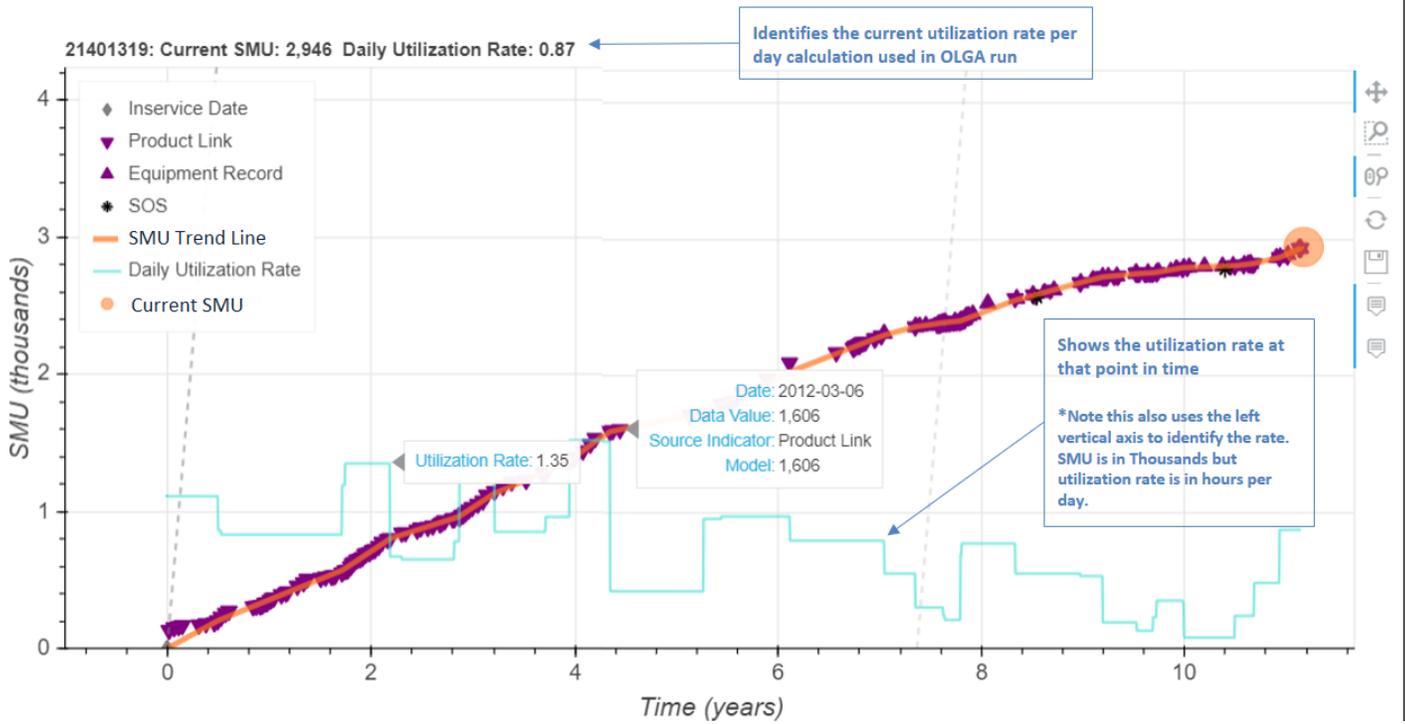
Visualization 1 – Functionality:



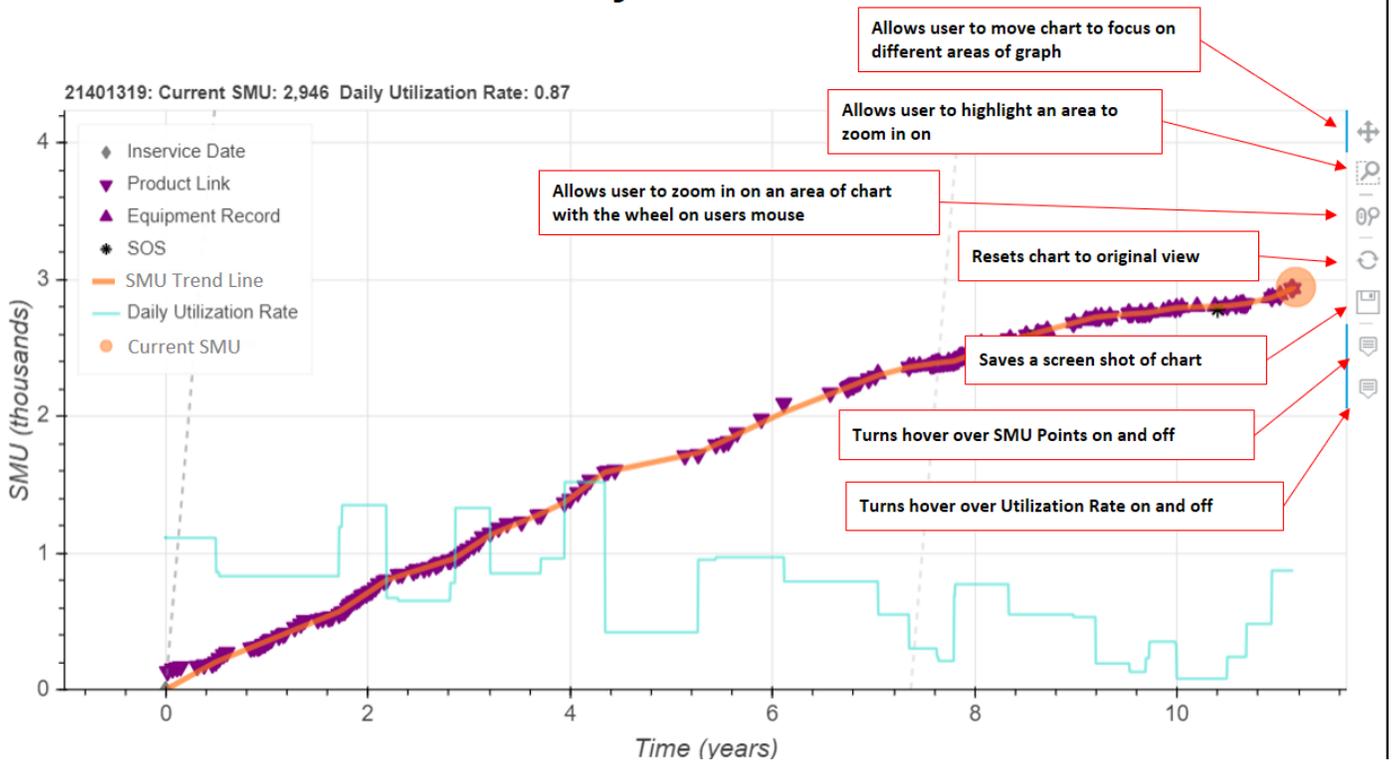
Visualization 1 – Functionality:



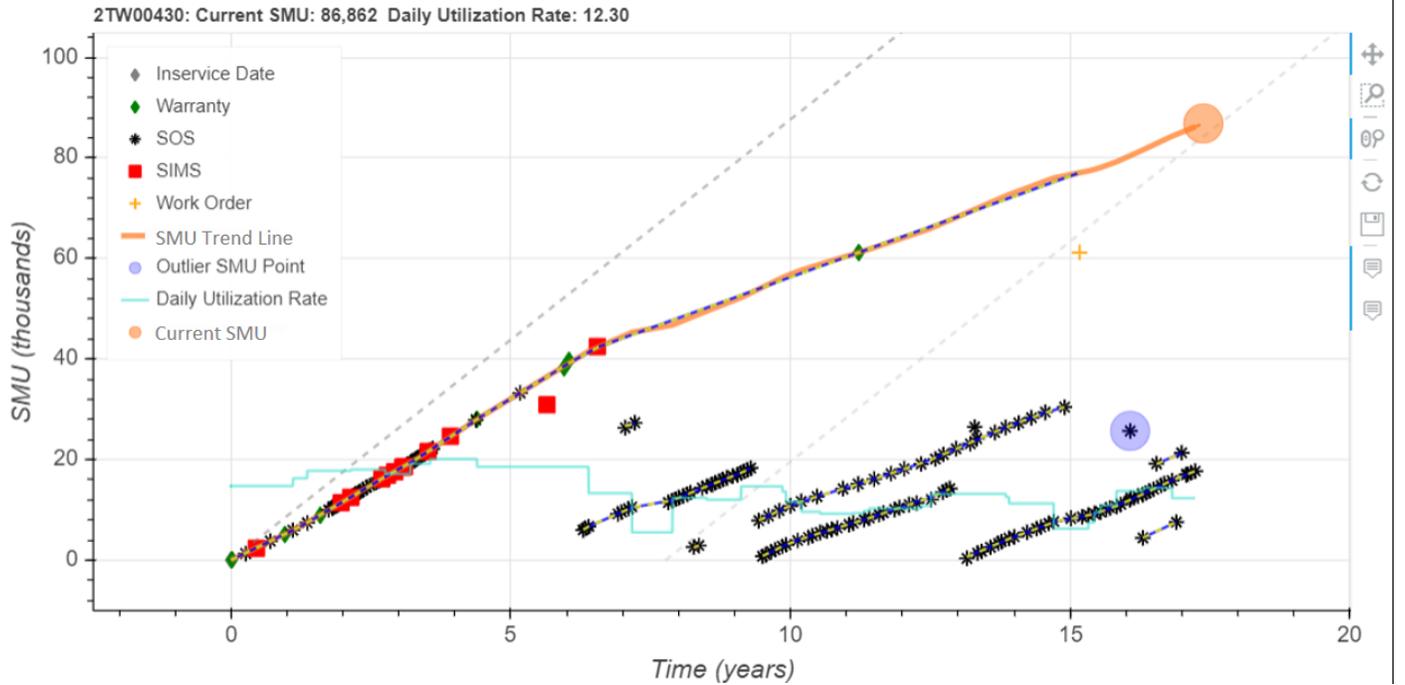
Visualization 1 – Functionality:



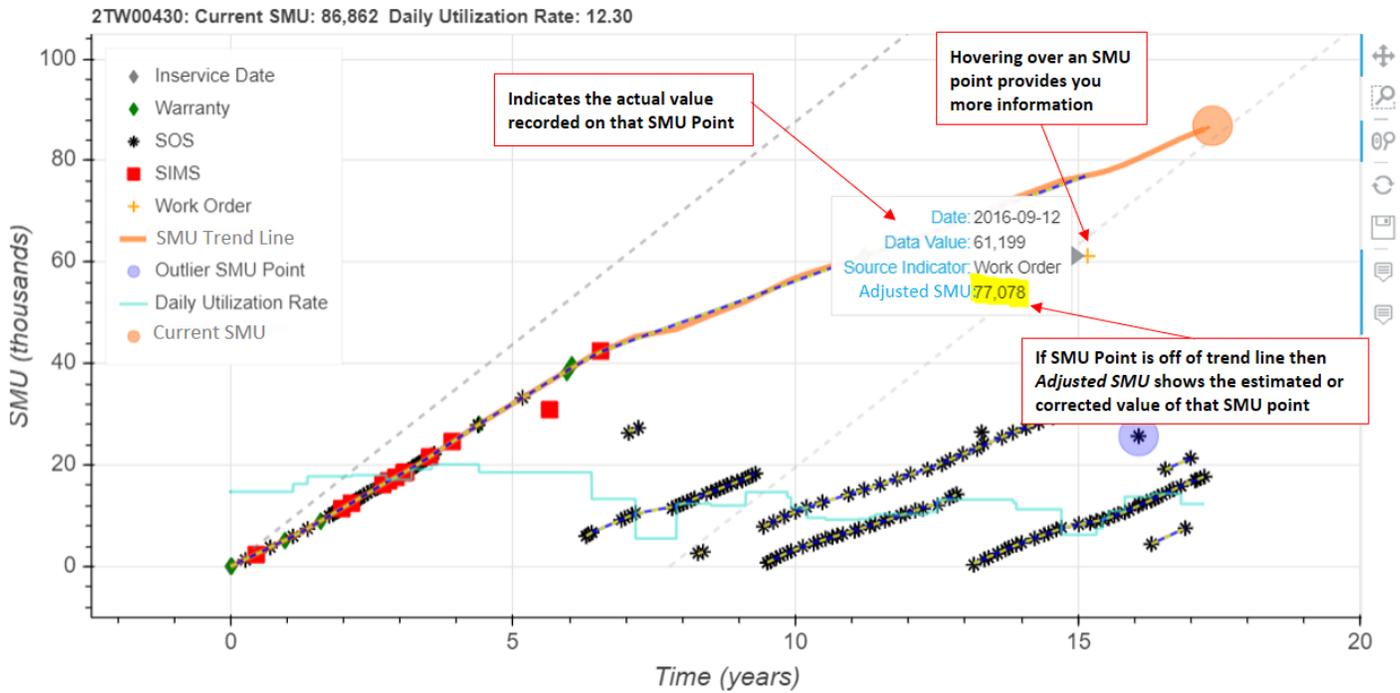
Visualization 1 – Functionality:



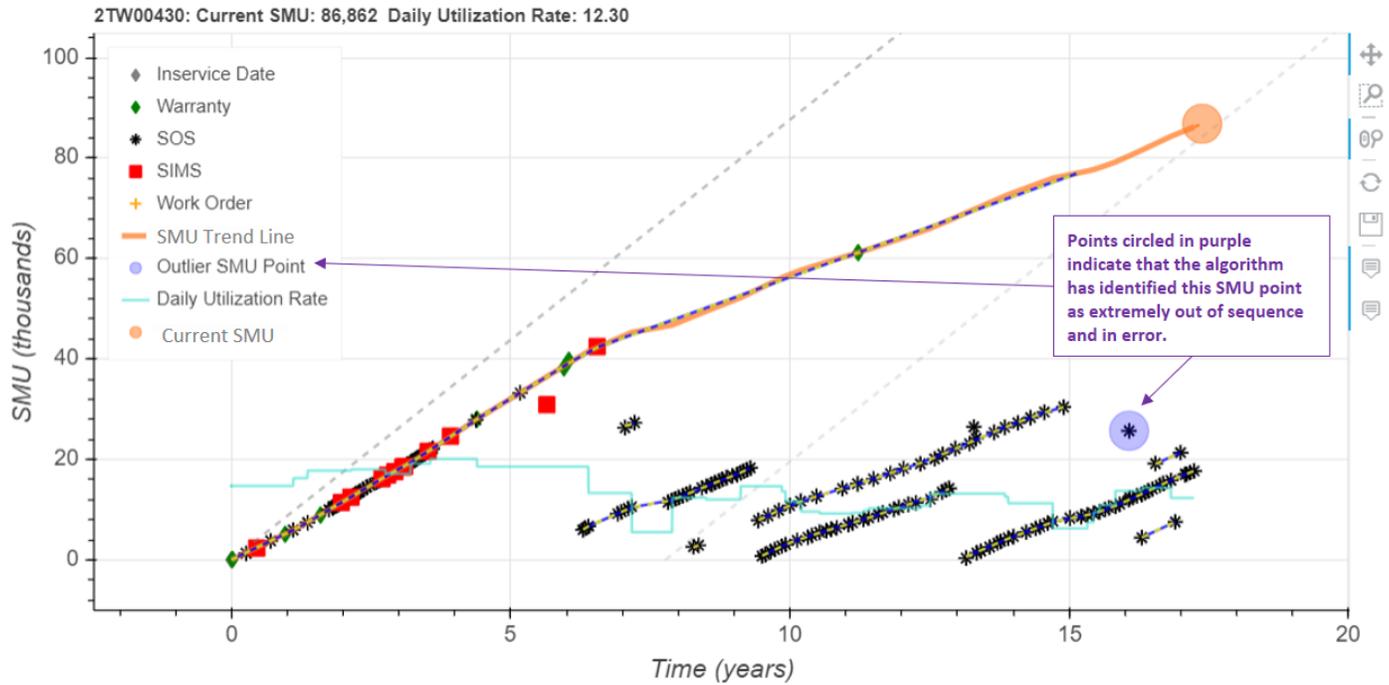
Visualization 2 – Functionality:



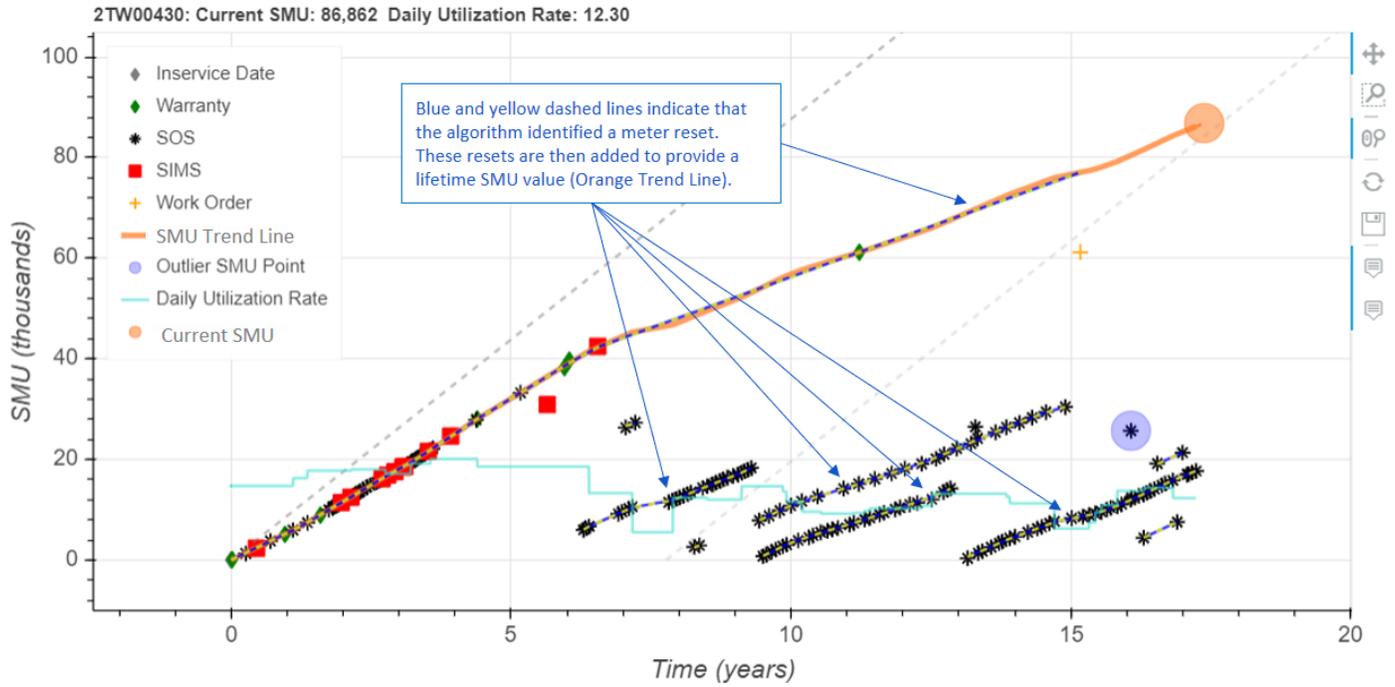
Visualization 2 – Functionality:



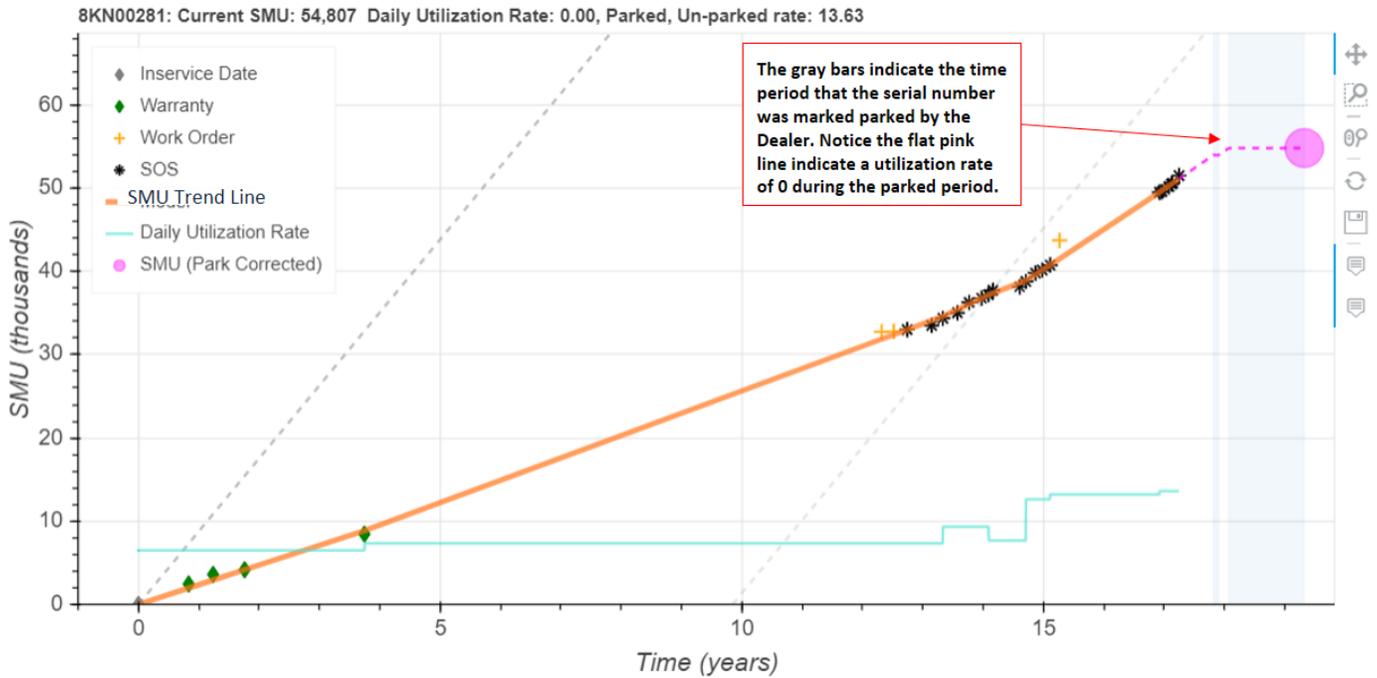
Visualization 2 – Functionality:



Visualization 2 – Functionality:



Visualization 3 – Functionality:



4.3.7 Customer Exclusion Report

The customer Exclusion Report displays all customers and equipment excluded from OLGA along with reasons for why they have been excluded. This report provides a helpful way to review customer and equipment exclusions. All Report data will display only the Customer and Equipment information that is associated to the Sales Reps identified during the *Admin* → *Add User* process.

Customer Exclusion Report

Filters:

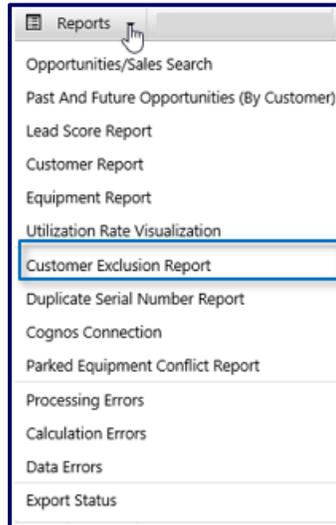
Page: 1 2 3 4 5 6 7 8 9 10 11 Total Record(s) : 53294 Show 100 Records

Previous 12 Month Period (Sales Value/Opportunity Value)

Customer Name	Customer Number	Territory Dealer Code	Division Code	Number of Units	Reason For Exclusion	Exclusion Details	May '16	Jun '16	Jul '16	Aug '16	Sep '16	Oct '16	Nov '16	Dec '16	Jan '17	Feb '17	Mar '17	Apr '17	Total Sales Value	Total Opportunity Value	Total Percentage	
Sum Total							9,848,138	8,790,893	10,185,666	15,980,136	12,938,915	8,933,580	10,871,238	11,306,963	12,797,936	12,041,496	15,655,682	9,363,659	133,934,261	177,139,659	75.6	
Customer 000001A	000001A	TD11	C	475	Contains Alpha Character Customer Type	W	1,172,666	1,577,174	1,300,143	1,108,166	1,442,429	1,770,802	1,123,491	1,311,398	1,242,312	1,297,036	1,962,789	1,896,272	0	17,204,899	0.0	
Customer 012174	012174	TD11	B	123	Equipment By Territory Customer Number Range County/State Code	X 012174-012174 WA	983,532	520,783	1,075,240	464,161	1,032,142	1,597,688	847,688	1,015,011	335,241	1,057,711	1,151,135	-	320,862	10,089,348	3.2	
Lara Steyn	L50001	TD11	B	119	Equipment by Serial Number and Customer Number	AGC01442L50001, AGC01339L50001, AGC00134L50001 X L50001-L50001	817,632	721,885	645,263	660,302	967,319	1,164,790	714,667	521,045	791,121	533,886	1,121,050	105,417	570,588	105,417	9,229,547	1.1
Customer 028341G	028341G	TD11	B	33	Contains Alpha Character		227,995	330,481	421,177	737,652	971,429	247,208	742,511	445,072	766,447	236,603	226,233	385,412	0	5,741,821	0.0	
Customer 037239A	037239A	TD11	B	67	Equipment By Territory Contains Alpha Character	X	367,062	132,808	437,917	456,007	705,968	518,830	598,550	583,055	229,373	470,461	211,162	619,960	0	5,331,092	0.0	
Customer 028341C	028341C	TD11	B	41	Contains Alpha Character		325,049	571,270	345,247	220,910	371,717	397,199	358,834	482,453	468,100	330,954	448,092	385,227	92,172	4,705,052	2.0	
Customer 028341I	028341I	TD11	B	19	Contains Alpha Character County/State Code	WA	488,139	52,955	713,364	109,907	365,540	98,332	415,861	640,116	148,467	124,252	105,305	375,861	0	3,445,830	0.0	

4.3.7.1 How to Use the Customer Exclusion Report

9) In the OLGA web application, navigate to the Reports → Customer Exclusion Report



10) Apply any required filters on Customer or Reason for Exclusion.

- a. If no filters are applied, the complete data-set will be returned.
- b. Filter boxes have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

Customer Exclusion Report

▼ Filters

Customer:

Reason For Exclusion:

Territory Dealer Code:

- 11) Generate Report
- 12) Review Results

Customer Exclusion Report

► Filters

Page: 1 | 2 3 4 5 6 7 8 9 10 11 | Total Record(s) : 53294 | Show Records

Customer Name	Customer Number	Territory Dealer Code	Division Code	Number of Units	Reason For Exclusion	Exclusion Details	May'16	Jun'16
Sum Total							9,848,138 14,984,676	8,790,893 12,582,048
Customer 000001A	000001A	TD11	C	475	Contains Alpha Character Customer Type	W	0 1,172,666	0 1,577,174
Customer 012174	012174	TD11	B	123	Equipment By Territory Customer Number Range County/State Code	X 012174-012174 WA	0 983,532	0 529,783
Lara Steyn	LS0001	TD11	B	119	Equipment by Serial Number and Customer Number Equipment By Territory Contains Alpha Character Customer Number Range	AGC01442:LS0001, AGC01329:LS0001, AGC00134:LS0001 X LS0001-LS0001	0 817,632	0 721,885

- 13) Amend the exclusion configurations as necessary
 - a. If it is deemed that some of the customer exclusions are no longer valid, then the exclusion configurations should be amended. See **Section 2.7 Inclusions & Exclusions** for how to update exclusion configurations.

4.3.7.2 Customer Exclusion Report: Points of Consideration

Points to consider when Reviewing Data:

- If a customer is excluded for multiple reasons, each reason will be displayed using its own line item. For example, Customer 1000250 has an exclusion of Equipment by Territory and Customer Territory location.
- All customers excluded from OLGA via the exclusion configurations will be shown in this report, regardless of which reason was selected in the filters.
- If a customer has multiple divisions and only one is excluded, only that customer division will display on this report.
- If a customer has multiple divisions and they are all excluded, there will be multiple rows for that customer number in this report, one for each division.
- It is possible that customers may not be excluded every month. A customer that is listed on the report but has no value for the current month means they are currently included – refer to the hover text on the month columns. Changes can be seen over time.
 - Hover text: “-“ (Dash): customer currently included, “xx” (Value): customer currently excluded, “0” (Zero): currently excluded but no sales or opportunities that month

Sep	First row=Sales value; Second row=Opportunity values for specified month.
9.80	'-' Dash= Customer is included
16.74	'x' Value= Customer is excluded
	'0' Zero= Customer is excluded but had no Sales/Opportunities for specified month.

Best Practice: Dealers should review this report at least **every 6 months**. The OLGA Coordinator should consider whether the customers are still valid exclusions, working their way down the list from the largest opportunity value. It should be determined whether customers with large sales volumes are still valid exclusions from OLGA, noting that these sales are not presently being included in the Dealer’s POPS and POLS metrics.

Best Practice: Filter the report by descending **opportunity** (click on the opportunity heading twice to sort descending). This will quickly show the items from the highest opportunity value to the lowest opportunity value.

After the opportunities have been reviewed, then sort the report by descending **sales** (click on the sales heading twice to sort descending).

4.3.8 Duplicate Serial Number Report

The Duplicate Serial Number Report displays serial numbers that are associated with two or more dealerships. This report plays an important role in maintaining up-to-date information on customers and equipment for your territory.

Duplicates occur when a Serial Number is reported in the Equipment File from more than one dealership. Duplicate reports of a Serial Number can occur for several reasons, some of which a dealer may be unaware of. The Inclusion/Exclusion requirements listed in **Section 2.7 Inclusions & Exclusions** may play a role in how you handle duplicates.

Examples include, but are not limited to:

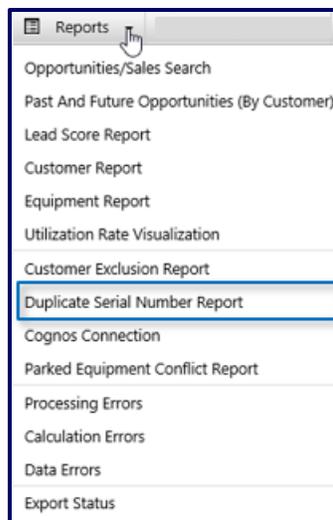
- The equipment was sold to a different customer in a different dealer's territory.
- The equipment is being used in another dealer's territory temporarily (e.g. for a project).
- The equipment is transient and frequently used by the customer across territories.
- The customer changed locations and is now using the equipment in a different dealer's territory.
- The customer naturally covers more than one dealer's territory and its equipment is used at various work sites.
- The customer itself is transient and moves across territories and brings its equipment to various work sites.

Note: The Opportunity Value column displays values for a rolling 12 months from the date the report is run.



4.3.8.1 How to Use the Duplicate Serial Number Report

- 1) In the OLGA web application, navigate to the Reports → Duplicate Serial Number Report



- 2) Apply any required filters on Customer, Serial Number, Model, or Duplicate Dealer Code.
 - a. If no filters are applied, the complete data-set will be returned.
 - b. Filter boxes have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

Duplicate Serial Number Report

▼ Filters

Customer: -- Select -- Serial Number: -- Select -- Model: -- Select --

Duplicate Dealer Region: -- Select -- Territory Dealer Code: -- Select --

- 3) Generate Report
- 4) Review Results

Serial Number	Model	Opportunity Value (Future 12 Months)	Customer Number	Customer Name	Territory Dealer Code	Date in System	Last Activity	Last Invoice Date	SMU	Duplicate Dealer Region	Duplicate Dealer Date in System	Duplicate Dealer Last Activity
Serial #	Model #	388,493	TEST123	Customer 123	D350	10/10/2003	01/29/2007		33,711	Region	07/03/2007	11/27/2018
Serial #	Model #	336,389	TEST124	Customer 124	D350	08/27/2015	08/27/2015		55,353	Region	02/26/2018	08/23/2018
Serial #	Model #	336,389	TEST124	Customer 124	D350	08/27/2015	08/27/2015		55,353	Region	08/14/2001	05/10/2011
Serial #	Model #	249,888	TEST125	Customer 125	D350	04/14/2009	08/31/2016	10/22/2018	79,044	Region	11/30/2006	11/28/2018
Serial #	Model #	249,813	TEST126	Customer 126	D350	02/12/2014	08/31/2016	12/14/2015	78,377	Region	08/28/2006	11/28/2018

- a. Answer the question: *Is this serial# valid?*
 - i. Verify that the serial# is the correct serial# for that machine
 1. If the serial# is incorrect, then update the serial# in your Equipment File
- b. Answer the question: *Does this serial# belong to a customer in your territory?*
 - i. Verify that the serial# is still owned by the listed customer account
 1. If the serial# is no longer owned by the listed customer:
 - a. If the serial# was sold (through auction/reseller, etc.) to a customer in **your territory**, then assign the serial# to the new/current owner

- b. If the serial# was sold (through auction/reseller, etc.) to a customer **in another dealer's territory**, then you should remove this equipment from your active equipment population
 - c. If the owner is **unknown**, then remove the serial# from the listed customer & assign it to an "unknown customer" or other unique group to identify such equipment
- c. Answer the question: *In what territory does this equipment frequently operate?*
- i. Verify that the serial# is operating in your territory
 1. If the equipment operates **in your territory** most of the time, then leave the equipment Included
 2. If the equipment operates **outside of your territory** most of the time, then Exclude the equipment
 3. If the equipment is **unknown** as to where it operates most of the time, then by default you should leave the equipment Included
- d. Answer the question: *Are there several pieces of equipment on this report that belong to one customer?*
- i. If "yes", then you should validate whether this customer is a transient customer and whether the customer's entire fleet moves across various dealer territories.
 1. If the customer is transient, then you should consider Excluding the entire customer.
 - a. Transient customers where less than 25% of their activity is within the established Dealer territory should be Excluded.
- 5) Remaining Resolution Option
- a. If a piece of equipment is duplicated but active in your territory and belongs to one of your customers, then it is duplicated because another dealer has also marked this equipment as active in their territory for one of their customers. This may be a conflict requiring resolution but it may also indicate that the customer spends time across multiple dealer territories.

4.3.8.2 Duplicate Serial Number Report: Points of Consideration

Points to consider when Reviewing Data:

- The Opportunity Value column is the opportunity value over the previously rolling 12 months.
- The Last Activity column is the last recorded activity listed in the Equipment Record.
- This new report will show serial numbers in your equipment population that are also reported by other dealer(s). Knowing this information allows for dealers to verify which dealership should have a particular serial number listed as active in their equipment population and know when to update the equipment population in their business system.

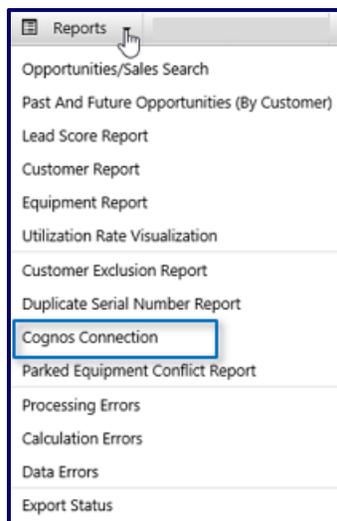
- This report is only available to those whose User Role allows for visibility of the Duplicate Serial Number Report. Typically, this access is for Dealer Admins only.
 - *If you do not have access to this report and believe you need access, please contact your OLGA Coordinator or Champion to request a review of your access level in OLGA.*
- There may be times when you need to access more indicative or historical data on machines or engines (ex: machine location, engine owner, transaction date, source of information, etc.). The **Machine and Power Systems Serial Number Lookup** reports provide a single place to show this data for a Machine or Power Systems serial number. This is also known as Asset Tracking Reports.
 - Direct URL:
https://cognosanalytics.cat.com/analytics/bi/?perspective=home&folder=.public_folders%2FCIM+-+Customer+Information+Management%2FCIM+Reports%2FDIP&location=team

4.3.9 Cognos Connection

This option is a direct connection to IBM Cognos: <https://cognosanalytics.cat.com/>

4.3.9.1 How to Use the Cognos Connection Link

- 1) In the OLGA web application, navigate to the Reports → Cognos Connection



4.3.10 Parked Equipment Conflict Report

The Parked Equipment Conflict report compares the Parked Indicator with the new Utilization Rate information for that serial number. Any serial number accumulating more than 5 hours per month and marked as “Parked” will be listed in the conflict report. The purpose of this report is to clearly show where there are discrepancies between the reported activity indicator and the actual usage of that serial number.

Note: This report does not show naturally Parked machines (refer to **Section 3.4.2.1 Automatically Parking a Serial Number** for more details on this type of Parking).

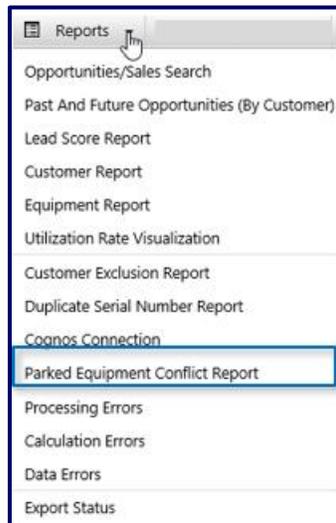
It only shows those machines that have been actively Parked by the dealer in their business system.

Of note is that the Duplicate Serial Number column lets a user know if that serial number is also being reported by a different dealership. If “yes” then the serial number will also be visible on the Duplicate Serial Number Report.

Best Practice: Dealers should review this report to determine which serial numbers should have their activity indicator reviewed. For each serial number listed, the dealer should determine if that serial number is still Parked or if it needs to become Active.

4.3.10.1 How to Use the Parked Equipment Conflict Report

- 1) In the OLGA web application, navigate to the Reports → Parked Equipment Conflict Report



- 2) Apply any required filters on Customer, Serial Number Prefix, or Serial Number.
 - a. If no filters are applied, the complete data-set will be returned.
 - b. Filter boxes have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

Parked Equipment Conflict Report

▼ Filters

Customer

S/N Prefix

Serial Number

Duplicate Serial Number

Territory Dealer Code

- 3) Generate Report
- 4) Review Results

Parked Equipment Conflict Report

▶ Filters

Page : 1 | Total Record(s) : 93 | Show Records |

Serial Number	Model	Territory Dealer Code	Customer Number	Customer Name	Parked SMU	Parked SMU Date	Current SMU	Current SMU Date	Duplicate Serial Number
13X01615	955L	TD11	058103	Customer 058103	18,521	10/01/2016	19,303	02/01/2018	No
1XM00156	320	TD11	015512	Customer 015512	10,343	01/01/2018	11,795	02/01/2018	Yes
20Z00494	953	TD11	031778	Customer 031778	7,040	01/01/2018	8,698	02/01/2018	Yes
20Z00858	953	TD11	094578	Customer 094578	11,704	01/01/2018	13,284	02/01/2018	No
20Z01209	953	TD11	094578	Customer 094578	14,527	01/01/2018	16,641	02/01/2018	No
21Z01991	963	TD11	094578	Customer 094578	15,594	01/01/2018	16,470	02/01/2018	No
21Z02370	963	TD11	094578	Customer 094578	10,123	01/01/2018	10,538	02/01/2018	No
27Y01264	D3B	TD11	094578	Customer 094578	12,768	01/01/2018	28,289	02/01/2018	No
2BW00892	789C	TD11	0283411	Customer 0283411	48,355	01/01/2018	52,688	02/01/2018	No

4.3.11 Processing Errors Report

The Processing Error Report displays errors preventing the OLGA calculation from running. All errors requiring an update from the configurations will be displayed.

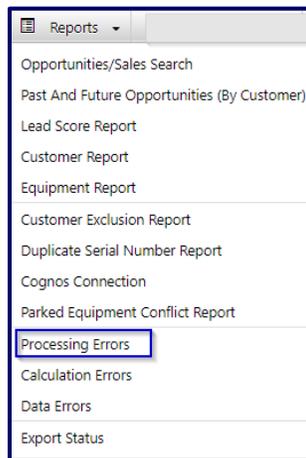
These include:

- Missing Default Currency (refer to **Section 2.6.4 Currencies** for how to add a default currency)
- Missing Currency Conversion Rate (refer to **Section 2.6.4 Currencies** for how to add a currency conversion rate)
- Missing Default Labor Rate (refer to **Section 2.6.6 Labor Rates** for how to add a default labor rate)
- Missing Generic Part Number (refer to **Section 2.6.5 Generic Parts** for how to add generic part numbers)

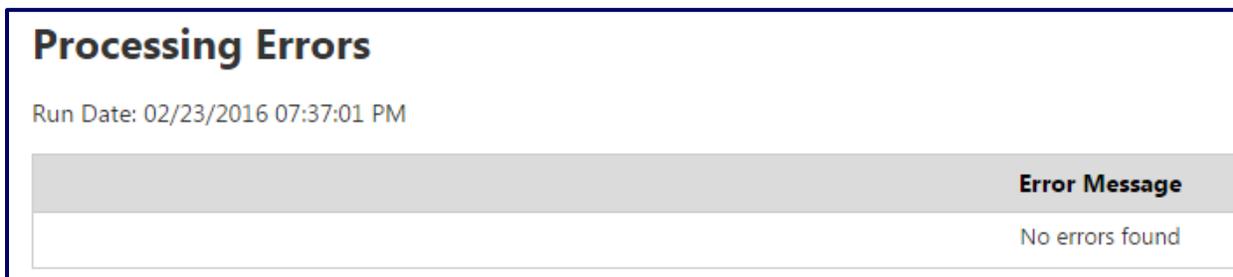
Note: It is unexpected that a user will ever see a processing error issue in OLGA. However, it could be caused by a system error on the Caterpillar side, such as a firewall or other server error. The Caterpillar DSD OLGA Consultant will notify the Dealer if there are any issues running the OLGA calculations.

4.3.11.1 How to Use the Processing Error Report

- 2) In the OLGA web application, navigate to the Reports → Processing Errors Report



- 3) This page will immediately show if there are any processing errors



4.3.12 Calculation Error Report

The Calculation Errors Report shows dealer data error(s) that is preventing opportunities to generate for equipment. All errors requiring an update in the configuration will be displayed.

Errors Include:

Error Message	Description	Error Resolution
Duplicate BUILDER File	There are two or more BUILDER files for the same equipment serial number. OLGA cannot determine which file to use.	<ol style="list-style-type: none"> 1. Contact the Caterpillar Enterprise Help Desk to indicate that there is a duplicate CAT BUILDER File.
Serial Number Assigned to Multiple Customers at Your Dealership	<p>Can occur in 2 cases:</p> <p>(1) When an engine serial number is present as both an equipment record and component equipment record, but with different customer numbers. This leads to multiple records of the same engine serial number listed for both customers.</p> <p>(2) When an engine serial number is present as a component for multiple different non-Cat serial numbers. This will need to be corrected before opportunity can be calculated for that serial number.</p>	<ol style="list-style-type: none"> 1. Verify that the serial number is assigned to only one customer number. 2. Update the serial number in either the Customer Record or the Equipment Record in the Dealer's ERP system, whichever is affected. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
Missing BUILDER File	Equipment that has no opportunity in a particular run due to <i>Missing BUILDER File</i> . No BUILDER data is available for the serial number listed.	<ol style="list-style-type: none"> 1. Verify that the serial number is a correct and compliant Caterpillar machine or engine serial number in Dealer records. 2. Enter the correct serial number in the Equipment Record in the Dealer's ERP system. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect. 4. If the Serial Number is valid --> Contact the Caterpillar Enterprise Help Desk to indicate that this Serial Number Prefix needs to be added to the list of BUILDER files to be created by Cat. 5. If the CAT BUILDER File is not in queue --

		> Upload a Dealer BUILDER file for the equipment's serial number to OLGA.
Missing Customer Number	Customer record exists but has no customer number listed.	<ol style="list-style-type: none"> 1. Verify customer number in Dealer records. 2. Enter correct customer number in the Customer Record in the Dealer's ERP system. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
Invalid Customer Number in Equipment Record	Equipment that has no matching customer number in the <i>Customer Number</i> file. The serial number in the Dealer's equipment file has an invalid customer number (*not* blank).	<ol style="list-style-type: none"> 1. Verify customer number in Dealer records. 2. Update correct customer number in the Equipment Record in the Dealer's ERP system. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
Missing Engine Performance Data Record	Equipment that has no <i>Performance Data in the Utilization Data</i> . Engine identification error.	<ol style="list-style-type: none"> 1. Contact the Caterpillar Enterprise Help Desk to indicate that this Serial Number needs to be added to the Engine Performance Data set.
Missing Engine Interval	Equipment that is missing Engine Interval in the Engine Data table. An engine identification error.	<ol style="list-style-type: none"> 1. Contact the Caterpillar Enterprise Help Desk to indicate that this Serial Number needs to be added to the Engine Performance Data set.
Missing Engine Base Data Record	Equipment that is missing Base Data in the Engine Data table. An engine identification error.	<ol style="list-style-type: none"> 1. Send a request to the TMI helpdesk via enginesoftware@catsupport.com to indicate that this Serial Number needs to be added to the Engine Base Data set.

<p>Out of Scope</p>	<p>Equipment that are not within OLGA's scope for opportunity calculation. Examples include: Work Tools, Lift Trucks, Original Engine Manufacturer (OEM), Defense Products, Uninterruptable Power Supply (UPS), Automatic Transfer Switches (ATS), Winches, Mitsubishi, and others.</p>	<ol style="list-style-type: none"> 1. Verify that the serial number should be included in OLGA for opportunity calculations. 2. If the Serial Number is correct --> There is nothing to be done about this error message. This equipment is not planned to be included in the OLGA opportunity calculation. 3. If the Serial Number is incorrect --> Enter the correct serial number in the Equipment Record in the Dealer's ERP system. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
<p>Invalid Caterpillar Serial Number Format</p>	<p>Equipment serial number does not comply with Caterpillar serial number format.</p> <p>Correct serial number format contains:</p> <ul style="list-style-type: none"> - 8 characters in length - First 3 characters are alphanumeric - Characters 4-8 (last 5) are numbers - No special characters - First 2 characters are not '00' 	<ol style="list-style-type: none"> 1. Verify that the serial number is follows the correct formatting. 2. Enter the correct serial number in the Equipment Record in the Dealer's ERP system. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
<p>All three, Top End Fuel, InFrameFuel, and MajorFuel can not be null for Gas Engines</p>	<p>Missing fuel data for diesel engines.</p>	<ol style="list-style-type: none"> 1. Contact the Caterpillar Enterprise Help Desk to indicate that this Serial Number needs fuel data to be added to the appropriate engine data table.
<p>All three, Top End Fuel, InFrameFuel, and MajorFuel can not be null for Diesel Engines</p>	<p>Missing fuel data for diesel engines.</p>	<ol style="list-style-type: none"> 1. Contact the Caterpillar Enterprise Help Desk to indicate that this Serial Number needs fuel data to be added to the appropriate engine data table.
<p>Missing Currency Conversion</p>	<p>Equipment that has no opportunity in a particular run due to <i>Invalid or Missing Currency Conversion in the Utilization Data</i>. The Serial Number is not reported in the Utilization information.</p>	<ol style="list-style-type: none"> 1. Verify that the currency conversion is correct in the OLGA Web App. 2. Enter the correct currency conversion in the Currency Conversion configuration section of the OLGA Web App. 3. A new OLGA Calculation Run completed before the update will take effect.

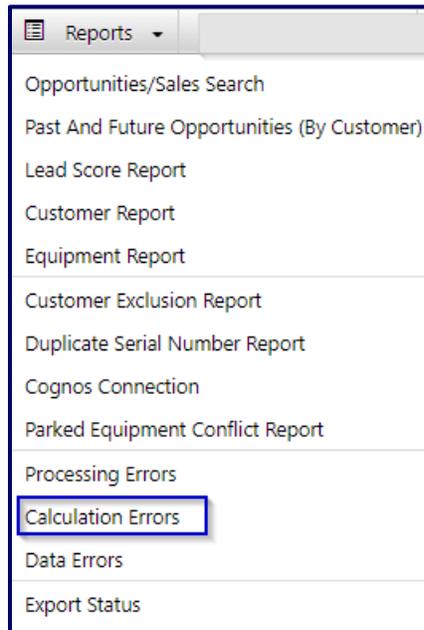
<p>Missing Serial Number</p>	<p>Equipment that has no opportunity in a particular run due to <i>Invalid or Missing Serial Number in the Utilization Data</i>. The Serial Number is not reported in the Utilization information.</p>	<ol style="list-style-type: none"> 1. Verify that the serial number is a correct and compliant Caterpillar machine or engine serial number in Dealer records. 2. Enter the correct serial number in the Equipment Record in the Dealer's ERP system. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect. 4. If the Serial Number is valid --> Contact the Caterpillar Enterprise Help Desk to indicate that this Serial Number Prefix needs to be added to the Utilization Data set.
<p>Missing SMU</p>	<p>Equipment that has no opportunity in a particular run due to <i>No SMU in the Utilization Data</i>. The utilization data has a NULL or <blank> value for Current SMU.</p> <p>This likely indicates that the serial number is missing necessary sales information listed on the sales record in the SIMS database.</p>	<p>The below steps can be reviewed through https://sims.cat.com</p> <ol style="list-style-type: none"> 1. Verify that the serial number is a correct and compliant Caterpillar machine or engine serial number in Dealer records. 2. Verify that the serial number is a prime product serial number. If it is not prime product, then no utilization rate will be calculated. 3. Verify that the SIMS SCOR (sales data) is filled in with Sales & Delivery Date, Dealer Code, and PWC. 4. Update the sales record for the fields in step 3 by contacting: <ul style="list-style-type: none"> - Machines: global_sales_reporting@cat.com - Engines: sales_to_user@cat.com 5. If Sales & Delivery Date, Dealer Code, and PWC are valid then OLGA was unable to generate an estimated utilization rate per the Estimated Utilization Rate criteria. <ul style="list-style-type: none"> - To resolve this issue, new SMU points are required to update the utilization rate and SMU data. <p>Note: The update to the SMU may take additional time to update as this calculation is performed outside of the Dealer's OLGA Calculation Run.</p>

<p>Missing Utilization Error</p>	<p>Equipment that has no opportunity in a particular run due to <i>No Utilization Rate in the Utilization Data</i>. The utilization rate for a piece of equipment is calculated as 0 or NULL or <blank>.</p> <p>This likely indicates that the serial number is not listed in Caterpillar's master serial number list (SIMS database).</p>	<p>The below steps can be reviewed through https://sims.cat.com</p> <ol style="list-style-type: none"> 1. Verify that the serial number is a correct and compliant Caterpillar machine or engine serial number in Dealer records. 2. Verify that the serial number is a prime product serial number. If it is not prime product, then no utilization rate will be calculated. 3. Verify that the SIMS SCOR (sales data) is filled in with Sales & Delivery Date, Dealer Code, and PWC. 4. If fields in step 3 are missing or need updated, send a request along with a copy of customer's equipment invoice (machine and/or engine) to the respective team below: <ul style="list-style-type: none"> - Machines: global_sales_reporting@cat.com - Engines: sales_to_user@cat.com <p>Note: The update to the SMU may take additional time to update as this calculation is performed outside of the Dealer's OLGA Calculation Run.</p>
<p>Missing Utilization Rate</p>	<p>Equipment that has no opportunity in a particular run due to <i>No Utilization Rate in the Utilization Data</i>. The utilization rate for a piece of equipment is calculated as 0 or NULL or <blank>.</p> <p>This likely indicates that the serial number is not listed in Caterpillar's master serial number list (SIMS database).</p>	<p>The below steps can be reviewed through https://sims.cat.com</p> <ol style="list-style-type: none"> 1. Verify that the serial number is a correct and compliant Caterpillar machine or engine serial number in Dealer records. 2. Verify that the serial number is a prime product serial number. If it is not prime product, then no utilization rate will be calculated. 3. Verify that the SIMS SCOR (sales data) is filled in with Sales & Delivery Date, Dealer Code, and PWC. 4. If fields in step 3 are missing or need updated, send a request along with a copy of customer's equipment invoice (machine and/or engine) to the respective team below: <ul style="list-style-type: none"> - Machines: global_sales_reporting@cat.com - Engines: sales_to_user@cat.com <p>Note: The update to the SMU may take additional time to update as this calculation is performed outside of the Dealer's OLGA Calculation Run.</p>

Note: The Caterpillar Central OLGA Team is currently performing analysis on these error messages. If the listed corrections do not resolve the errors, then please contact the Caterpillar Enterprise Help Desk (USA: 1-309-494-4357 & International: 1-877-737-2242).

4.3.12.1 How to Use the Calculation Error Report

-  1) In the OLGA web application, navigate to the Reports → Calculation Errors



- 2) Apply any required filters on Customer or Serial Number.
- If no filters are applied, the complete data set will return.
 - Filter boxes that have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - This will return all of the options that match the search criteria, from which the user can make the required selections.
 - There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

Calculation Errors

Filters

Customer: -- Select --
 Serial Number: -- Select --
 Model: -- Select --
 Error Message: -- Select --
 Territory Dealer Code: -- Select --

- 3) Generate Report
- 4) Review Results

Run Date: 10/26/2016 03:26:12 PM
 Page: 1 | 2 3 4 5 6 7 8 9 10 11 | Total Record(s) : 3822 | Show 100 Records

Customer Name	Customer Number	Serial Number	Model	Error Message	Error Details
Customer 000025	000025	TBL01516	TL943	Missing BUILDER File	
Customer 000025	000025	WWC00464	735	Out Of Scope	OEM ARTICULATED TRUCK
Customer 000043	000043	NAT00633	ONDP6NAT	Missing BUILDER File	
Customer 000077	000077	NGD01277	ONGFTNGD	Missing BUILDER File	
Customer 000125	000125	11K01246	977K	Missing Utilization Error	
Customer 000147	000147	69H03375	951C	Missing Utilization Error	
Customer 000172	000172	4YC07165	777B	Missing Utilization Error	
Customer 000172	000172	6SA02318	SR 807	Missing BUILDER File	
Customer 000172	000172	5WG00532	E240B	Missing BUILDER File	
Customer 000172	000172	THX02038	C9	Missing BUILDER File	
Customer 000240	000240	91P00177	815	Missing Utilization Error	

- 5) Make the necessary changes and update customer and equipment data in the Dealer ERP system.

Best Practice: Serial Numbers must be correct and compliant Caterpillar serial numbers. This means the serial numbers should be 8 alphanumeric characters long with the last 5 digits being all numbers.



Best Practice: Dealers should review this report at least **every 6 months**. The goal should be to have no calculation errors.

These issues must be corrected in the Dealer's ERP system. When the Dealer next sends Caterpillar their customer and equipment files and the OLGA data is next processed, then the calculation errors will no longer exist.

4.3.13 Data Errors Report

The Data Errors Report displays errors that do not prevent OLGA from calculating opportunities but do affect the filters in the Past and Future Opportunities (By Customer) report (see **Section 4.3.3 Past and Future Opportunities (by Customer) Report**) and the Opportunities/Sales Search report (see **Section 4.3.2 Opportunities/Sales Search Report**).

Errors Include:

Error Message	Description	Error Resolution
Missing Division Code on Customer Account	The division code is a null value for a particular customer.	<ol style="list-style-type: none"> 1. Verify the division code in Dealer records and make corrections in the Dealer ERP as needed. 2. Verify the mapping for the Division Code in the Customer Interface. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
Missing Industry	The Industry is a null value for a particular customer and division combination.	<ol style="list-style-type: none"> 1. Verify the industry code in Dealer records and make corrections in the Dealer ERP as needed. 2. Verify the mapping for the Industry Code in the Customer Interface. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.

<p>Missing Sales Rep</p>	<p>The Sales Rep is a null value for a particular customer and division combination.</p>	<ol style="list-style-type: none"> 1. Verify the sales rep information in Dealer records and make corrections in the Dealer ERP as needed. 2. Verify the mapping for the Sales Rep in the Customer Interface. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
<p>Missing Branch Store</p>	<p>The Branch Store is a null value for a particular customer.</p>	<ol style="list-style-type: none"> 1. Verify the branch store information in Dealer records and make corrections in the Dealer ERP as needed. 2. Verify the mapping for the Branch Store in the Customer Interface. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
<p>Missing Customer Address</p>	<p>The Customer Address is a null value for a particular customer.</p>	<ol style="list-style-type: none"> 1. Verify the customer address information in Dealer records and make corrections in the Dealer ERP as needed. 2. Verify the mapping for the Location Information in the Customer Interface. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
<p>Mismatched Division in Equipment and Customer Records</p>	<p>The Equipment records and Customer records show different Division Codes for the same customer and equipment combination.</p>	<ol style="list-style-type: none"> 1. Verify that the division information is a correct for the customer and equipment information in Dealer records. 2. Enter correct division code in the Equipment Record and/or Customer Record in the Dealer's ERP system. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.

<p>Missing or Zero Part Price</p>	<p>The Part Price is either a null value or a 0 (zero) value for a part number used in a Dealer Builder file.</p>	<ol style="list-style-type: none"> 1. Identify the Dealer Builder files the part is used on. 2. If the part is a dealer defined part, then add the part to the Dealer Parts Section of OLGA. 3. If the part is a Cat part and is current (not cancelled), then report the part number to the Central OLGA Team. 4. If the part is a Cat part and is non-current (cancelled), then use the Caterpillar cancelled parts (NPR) process to update the parts information. 5. Upload the corrected Dealer Builder file(s) and complete a new OLGA Calculation Run to update the information.
<p>Missing Contract Information</p>	<p>The Contract information is a null value for a particular customer.</p>	<ol style="list-style-type: none"> 1. Verify the contract information in Dealer records and make corrections in the Dealer ERP as needed. 2. Verify the mapping for the Service Contract in the Equipment Interface. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.
<p>Missing Labor Information</p>	<p>The Labor information is a null or missing for both the Labor Hours (quantity) and Bill Rate on a Labor record of an Invoice.</p>	<ol style="list-style-type: none"> 1. Verify the labor information in Dealer records and make corrections in the Dealer ERP as needed. 2. Verify the mapping for the Labor Hours (quantity) and Bill Rate in the Invoice Interface. 3. Updated information must be sent from the dealer to CDDW and a new OLGA Calculation Run completed before the update will take effect.

Example 1:

Customer ABC Construction does not have a branch code in the Dealer's ERP system. The filtering of OLGA data by store will be inaccurate as this customer will not be included in any stores.



Best Practice: We suggest that Dealers make the needed changes to their ERP system to bring in more accurate customer file data. When the Dealer next sends Caterpillar their customer file and the OLGA data is next processed, these data errors will no longer exist. The data errors report is a great way to measure where information is inaccurate and should be updated.

4.3.13.1 How to Use the Data Errors Report



1) In the OLGA web application, navigate to the Reports → Data Errors



- 2) Apply any required filters on Customer or Error Message.
 - a. If no filters are applied, the complete data set will return.
 - b. Filter boxes that have only a small number of options. The user can select from the displayed options or if there are numerous options, the user can search by typing at least 3 characters and then selecting the search button.
 - i. This will return all of the options that match the search criteria, from which the user can make the required selections.
 - ii. There are options to Check All and Uncheck All to allow quick selection of multiple filter options.

Data Errors

▼ Filters

Customer

-- Select --

Error Message

-- Select --

Territory Dealer Code

-- Select --

Generate Report

Export to Excel

3) Generate Report

4) Review Results

Customer Name	Customer Number	Error Message	Error Details
Customer 0000130	0000130	Missing Division Code on Customer Account	
Customer 0000130	0000130	Mismatched Division in Equipment and Customer Records	Mismatch Between Customer and Equipment 4MG26354, Division E
Customer 0000130	0000130	Mismatched Division in Equipment and Customer Records	Mismatch Between Customer and Equipment 7FB97415, Division E
Customer 000041	000041	Mismatched Division in Equipment and Customer Records	Mismatch Between Customer and Equipment MXS15408, Division E
Customer 000041	000041	Mismatched Division in Equipment and Customer Records	Mismatch Between Customer and Equipment 5EK95863, Division E
Customer 000041	000041	Mismatched Division in Equipment and Customer Records	Mismatch Between Customer and Equipment BXS09665, Division E
Customer 000041	000041	Missing Division Code on Customer Account	
Customer 000056	000056	Missing Sales Rep	Missing Sales Rep Number for Division E
Customer 000082	000082	Missing Sales Rep	Missing Sales Rep Number for Division E

5) Make the necessary changes

- a. Update customer data in the Dealer ERP system to ensure that there are minimal data errors in OLGA.

Best Practice: Dealers should review this report at least **every 6 months**. The goal should be to have no calculation errors.

Dealers should update their ERP system data to ensure that each customer has a valid store, division, address and industry. Some customers may purposefully not be assigned to a sales representative, in which case a change may not be necessary to the customer's sales rep data.

4.3.14 Report Export Status

When a user selects Export to Excel in any of the above OLGA web application reports, OLGA begins to generate the export file. You can choose to name the file yourself or use the default naming. Depending on the size of the dataset being exported, the file generation may take a few minutes. The export will always include all columns shown in the on-screen report and may also contain additional columns of information

The Report Export Status page is a repository of reports exported to Excel, from where users can retrieve the files once they are ready to be downloaded. The time it takes to create a report is dependent on the amount of information being downloaded, so completion time may vary. Downloadable files are only available for 7 days after creating the export.

4.3.14.1 How to Use the Report Export Status

1) Run the report:

- a. Opportunities/Sales Search report (see [Section 4.3.2](#))
- b. Past and Future Opportunities by Customer report (see [Section 4.3.3](#))
- c. Lead Score report (see [Section 4.3.4](#))
- d. Customer Report (see [Section 4.3.5](#))
- e. Equipment Report (see [Section 4.3.6](#))
- f. Customer Exclusion report (see [Section 4.3.7](#))
- g. Duplicate Serial Number report (see [Section 4.3.8](#))
- h. Parked Equipment Conflict report (see [Section 4.3.10](#))
- i. Calculation Errors report (see [Section 4.3.12](#))
- j. Data Errors report (see [Section 4.3.13](#))

2) Select "Export" in any of the above reports

3) Name the file yourself or use the default naming

4) In the OLGA web application, navigate to the Reports → Report Export Status



- 5) The page will show a table of the reports that have been exported.
 - a. Initially while the report is being generated, the download column will be blank.

Export Status 🌐 - In Central Standard Time				
#	File Name	Request Date (MM/DD/YYYY) 🌐	File Export Status	Download
1	Calculation Errors	03/07/2016 02:13:00 PM	Generating Report	

- 6) calculation the web browser until the file is ready to be downloaded.
- 7) Click on the Download hyperlink to download the Excel file.

5. Sales Aggregation

Sales aggregation can be found in the OLGA Home Page (if the user has OLGA COGNOS access), the Opportunities/Sales Search Report, and the Past and Future Opportunities (by Customer) Report. This section will explain sales information, the filter options, and how each view displays in the OLGA web application.

5.1 Sales Data

The value of sales is the sum of invoices at Caterpillar suggested consumer list price. Sales include all parts with configured Sources of Supply and labor to Cat equipment. If there are sales under contract, then those sales will be associated to the end customer. Parts sales will be included even if the major class is unclassified or unknown. Sales will not be included for Miscellaneous charges, travel charges, or core charges.

5.2 Sales Event Aggregation Breakdown

Details on sales aggregation are most commonly found through the Opportunities/Sales Search Report. After generating a report, click on the Sales tab to see the values of total Labor Hours, Total Labor, Total Parts, and Total.



Customer Name	Customer Number	Work Order	Segment	Invoice Number	Invoice Date	Serial Number	Make	Model	Service Meter	Labor Hours	Labor Value	Part Value	Total Value	Contract	Invoice/WO	Match Type
Total										Total	Total	Total	Total			
Customer 1	#1	WO 2	02	Invoice #2	03/31/2015	Serial #1	AA	777D	18,637	208.00	29,952	87,944	117,896	No Contract	Details	Automated
Customer 1	#1	WO 1	03	Invoice #1	07/01/2014	Serial #1	AA	777D	18,428	220.00	27,718	81,909	109,627	No Contract	Details	Automated

Sales events are calculated per each unique invoice number – segment number combination. In the below screen print, there are two line items with the same invoice number. However, they have different segment numbers. Therefore, they are treated as two separate line items and as two separate sales events in OLGA.

Customer Name	Customer Number	Work Order	Segment	Invoice Number	Invoice Date	Serial Number	Make	Model
Total								
Customer 051564	051564	A181229	01	A181229	10/18/2013	3ML00949	AA	350
Customer 051564	051564	A181229	02	A181229	10/18/2013	3ML00949	AA	350

The Invoice/WO link on the far right of the Opportunities/Sales Search Report shows a breakdown of the invoice and the work order on separate tabs.

Customer Name	Customer Number	Work Order	Segment	Invoice Number	Invoice Date	Serial Number	Make	Model	Service Meter	Labor Hours	Labor Value	Part Value	Total Value	Contract	Invoice/WO	Match Type
Total																
Customer 1	#1	WO 2	02	Invoice #2	03/31/2015	Serial #1	AA	777D	18,637	208.00	29,952	87,944	117,896	No Contract	Details	Automated
Customer 1	#1	WO 1	03	Invoice #1	07/01/2014	Serial #1	AA	777D	18,428	220.00	27,718	81,909	109,627	No Contract	Details	Automated

Note: OLGA field names generally match up with corresponding field names in the CDDW.

5.2.1 Invoice/WO Detail – Invoice Tab

Information relating specifically to the invoice.

Invoice/Work Order - [**Serial #** /1133886]

Invoice
Work Order

5.2.1.1 Invoice Header/Segment

The Invoice tab shows the Sales total in the Invoice Header/Segment section. The total is the addition of all of the line item totals from the Invoice Parts and a single labor total line.

Invoice Header/Segment							
Invoice Number	Work Order	Segment	Serial Number	Make	Model	Total	Invoice Date
Invoice #	WO #	07	Serial #	AA	777D	33490.37	11/13/2013

5.2.1.2 Invoice Parts

There is a section for Invoice Parts that shows the percentage billed, unit price, and total for each part included on the invoice. All line items are added together with the invoice labor total to create a consolidated total that is listed in the Invoice Header/Segment section. The equation for total invoice parts by line item is:

Quantity * Percentage Billed to Customer * Unit Price = Total

Example 1:

Part# 1200293 → 2 * 1 * 2455.62 = 4911.24

Part# 1069823 → 2 * 1 * 1917.35 = 3834.70

Invoice Parts					Quantity	*	% Billed to Customer	*	Unit Price	=	Total
Part Number	Description	Source of Supply	Parts Major Class	Parts Subcategory	Quantity		Percentage Billed To Customer		Transaction Code	Unit Price	Total
1200293		000	5 - DRIVE TRAIN AND STEERING PARTS	5AA - DT: REPAIR & REPLACEMENT PARTS	2.00		100.00 %		S-Sale	2455.62	4911.24
1069823		000	5 - DRIVE TRAIN AND STEERING PARTS	5AA - DT: REPAIR & REPLACEMENT PARTS	2.00		100.00 %		S-Sale	1917.35	3834.70

Example 2

Part# 4792473 → 1 * 0.98 * 21,023.07 = 20,602.61

Part# 7C2122 → 2 * 0.98 * 8,480.26 = 16,621.31

Invoice Parts					Quantity		Percentage Billed To Customer		Transaction Code	Unit Price	Total
Part Number	Description	Source of Supply	Parts Major Class	Parts Subcategory	Quantity		Percentage Billed To Customer		Transaction Code	Unit Price	Total
4792473	PAN AS-OIL	000	2 - ENGINE	2BA - ENG: INTERNAL COMPONENTS	1.00		98.00 %		S-Sale	21023.07	20602.61
7C2122	DAMPER GP	000	2 - ENGINE	2BA - ENG: INTERNAL COMPONENTS	2.00		98.00 %		S-Sale	8480.26	16621.31

5.2.1.3 Invoice Labor

There is also a section for Invoice Labor that shows the labor hours, percentage billed, unit price, and total for labor included on the invoice. All line items are added together with the invoice parts total to create a

consolidated total that is listed in the Invoice Header/Segment section. The equation for total invoice labor by line item is:

$$\text{Labor Hours} * \text{Percentage Billed to Customer} * \text{Unit Price} = \text{Total}$$

Example 1

$$6 * 1 * 158 = 948$$

$$10.50 * 1 * 79 = 829.50$$

Invoice Labor					
Labor Hours	Percentage Billed To Customer	Transaction Code	Unit Price	Flat Labor Quote	Total
6.00	100.00 %	S-Sale	158.00	-	948.00
10.50	100.00 %	S-Sale	79.00	-	829.50

5.2.2 Flat Rate Invoices for Labor

For the flat rate labor dealer invoices, OLGA will use the flat rate labor amount from the invoice. The labor hours, percentage billed to customer, and unit price items are not used. Only the flat labor quote is used to populate the total. While the screen shows multiple line items with flat labor quote and totals, OLGA only uses the total one time. In the below example, there are two line items, but the total of 7,425.77 is only used one time. The line items are not added together as the flat rate indicates a flat rate for the entire service, rather than breaking down the rates by part or service.

Invoice Labor					
Labor Hours	Percentage Billed To Customer	Transaction Code	Unit Price	Flat Labor Quote	Total
5.00	100.00 %	S-Sale	65.00	7425.77	7425.77
5.00	100.00 %	S-Sale	65.00	7425.77	7425.77

5.2.3 Invoice/WO Detail – Work Order

Information relating specifically to the work order. This tab is included for informational purposes only. Work Order information is not used to calculate sales dollars.

Invoice/Work Order - [**Serial #** /1133886]

5.2.3.1 Work Order Summary

The Work Order summary section includes the name and dates the work order applies to.

Work Order			
Work Order	Customer Number / Name	Open Date	Close Date
WO #	Customer # - Customer Name	12/29/2014	03/31/2015

5.2.3.2 Work Order Segment

The Work Order Segment section indicates the repair details including the necessary job codes, component codes, etc. that are used in Matching as well as the total sales value.

Work Order Segment								
Segment	Job Code	Component Code	Modifier Code	Work App Code	Description	Total Parts	Total Labor	Total
02	020	1000			RECONDITION ENGINE	65852.99	29952.00	95804.99

5.2.3.3 Labor

The Labor section indicates the date(s) labor was conducted as well as the hours, rate, and total details.

Labor				
Labor Date	Charge Code	Labor Hours	Labor Rate	Total
01/22/2015	SHP	8.00	144.00	1152.00

5.2.4 Contract Invoicing

When a Dealer makes a sale of a part or service for a customer with a contract, the sale gets attributed to an internal account and the customer does not get charged. OLGA allocates the sale amount to the end customer based on the contract number. This process will show as sales to the end customer and not to the internal account.

OLGA performs this logic for invoices with an equipment serial number, a contract number and a revision number, or CSA. In the OLGA web application, under Opportunities/Sales Search Report, serial numbers under contract will be noted as “Contract.”

<u>Target Date</u>	<u>Next Interval</u>	<u>Labor Hours</u>	<u>Labor Value</u>	<u>Part Value</u>	<u>Opportunity Value</u>	<u>Contract</u>	<u>BUILDER Info</u>	<u>Match Type</u>
10/21/2013	500	0.50	50	55	105	Contract	Details	Unmatched

5.2.5 Configured Generic Parts

Any configured generic parts sold as a miscellaneous charge will be captured and included as a parts sale line item in the OLGA sales totals. Remember, generic parts serves two purposes:

- **Opportunity:** BUILDER files contain a generic part number to calculate opportunity and determine price for part value.
- **Sales:** Miscellaneous charges that match a configured generic part number or description are included in the sales values.

For more information about best practices for how to use generic parts, see [Section 2.6.5 Generic Parts](#). All other miscellaneous charges are not included (ex: travel changes and core charges).

5.2.6 Flat Rate Invoices for Parts

For the flat rate parts portion of an invoice, OLGA will process the parts detail by each part line item and will not use the flat rate amount.

5.3 Other Sales Event Aggregation Views

5.3.1 Sales Event Aggregation – OLGA Home Page

The sales values contribute to the calculation of POPS, POLS, Total Sales, and POLS hour values. This is only visible to those with OLGA COGNOS access.

POPS & POLS - Previous 12 Months			
	Sale Value	Opportunity Value	Percent (%)
POPS	222,951,004	485,275,830	45.9
POLS	88,045,157	324,232,488	27.2
TOTAL	310,996,161	809,508,318	38.4
	Sale Hours	Opportunity Hours	Percent (%)
POLS Hours	858,138	3,144,731	27.3

5.3.2 Sales Event Aggregation – Past and Future Opportunity (By Customer) Report

Blue colored sales values are links to the Opportunities/Sales Search Report with corresponding filters applied (customer number and date range). Zero will be displayed if there are no sales in the previous 12 months. Total % is calculated by the data from Sales Values and Opportunity Values to create POPS total.

Customer Name	Customer Number	# of Units	Previous 12 Months			12 Month Period (Opportunity Value/Number of Events)									
			Sales Value	Opp Value	Total %	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Total		93,684	310,822,671 529,340	26,581,611	1,169.3	2,284,197 1,740	2,112,285 1,738	2,259,908 1,796	2,349,517 1,827	2,282,000 1,792	2,607,616 1,849	2,423,293 1,841	2,208,316 1,852	2,024,778 1,847	2,478,999 1,727
Customer 1000250	1000250	14,453	119,903 482	3,907,116	3.1	297,201 223	360,576 247	378,993 235	350,561 230	420,600 223	415,344 248	279,096 221	361,395 261	264,341 212	392,751 223
Customer 003775	003775	61	3,312,804 456	606,751	546.0	232,854 54	8,837 19	120,494 35	65,051 32	34,521 27	25,170 29	97,684 41	22,748 27	39,909 21	100,223 51
Customer 5060884	5060884	116	341,073 419	297,581	114.6	84,393 37	9,450 21	17,828 29	34,301 36	28,954 28	16,958 35	3,362 19	28,661 29	46,120 35	85,060 31
Customer 9517580	9517580	44	1,364,330 2,118	178,631	763.8	17,048 11	13,885 9	12,131 13	11,310 11	8,578 8	72,250 23	198,007 33	10,131 8	10,151 12	8,463 7

6. Cognos for Analysis

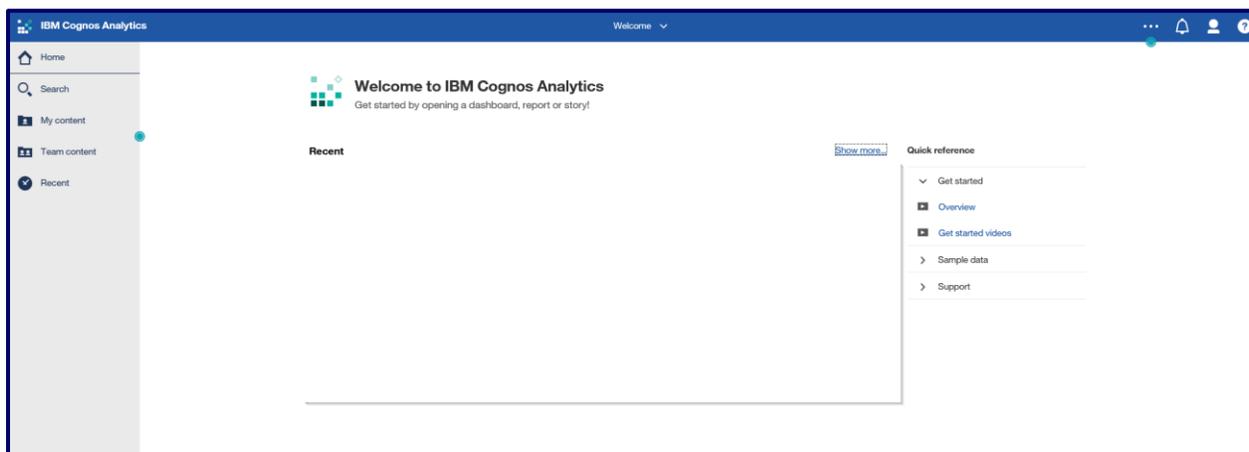
Cognos 11 (also known as Cognos Analytics) is an analytical tool provided to Dealers along with the OLGA web application. The purpose of Cognos is to provide more flexibility in the analysis of OLGA data. The standard reports in the OLGA web application provide significant detail but the format cannot be customized. Cognos enables the user to slice and dice OLGA data in many different ways. Among other things, Cognos allows customer views, saving of reports, downloading to excel, drill through reports (customer, equipment, sales, & opportunity), and shows plus and minus 2 years worth of data.

6.1 Logging into Cognos PowerPlay

OLGA reporting in Cognos PowerPlay is provided to Dealers as a part of the overall scope on OLGA. There is no additional cost for using Cognos PowerPlay. All maintenance and upgrades to Cognos are handled by Caterpillar. To access Cognos PowerPlay, use the following link.

<https://cognosanalytics.cat.com>

Access is Cognos cube for OLGA.



6.2 Granting Cognos PowerPlay Access

Like the OLGA web application, individual access to Cognos PowerPlay for OLGA is at the Dealer's discretion. The Dealer determines which internal staff and which Caterpillar staff have access to their OLGA Cognos PowerPlay Cube. The OLGA Coordinator(s) should manage user access through the following link:

<https://imap.cat.com/groupadmin/>.

Access Levels

Group Owner: Group Owner / Administrator: User can grant and revoke Cognos access. Initially, two or three Dealer Administrators will be set up by Caterpillar.

Member: Users who have access to the Cognos PowerPlay Cube and the OLGA Web Page Dashboard, but cannot grant or revoke access.

*Note: Do not forget to add all "Group Owner" users as a "Member" in order to ensure they can see the OLGA Cognos PowerPlay Cube **and** manage user access. Just adding someone as "Group Owner" will not let a user get into the OLGA Cognos PowerPlay Cube.

6.2.1 How to Grant Access to a Cognos PowerPlay Cube



When your dealership is initially installed with OLGA, provide your DSD OLGA Representative the names and CWS IDs of two or three people who you would like to administer Cognos PowerPlay access. Those individuals will be set up as Cognos PowerPlay Owners / Administrators going forward. User access is determined through CWS Groups. Ownership and responsibility of CWS Groups belongs to the dealer, which includes maintaining group validations and an accurate user access list.

After initial setup, please manage user access starting with Step 2 below.

- 1) If user has access, go to <https://imap.cat.com/groupadmin/>
- 2) If you need to add a MEMBER, then click the "By Group" link under "Members" to the left. A group drop down selection will appear.
 - a. If you need to add an OWNER, then skip to Step 9.



- 3) Choose the group you want to add users to from the drop down selection. A list of current users in that group will appear.

Group Members - By Group (PROD)

Select the group whose members you wish to administer out of the list below.

GROUP NAME▼

- 4) Select the “Add Members” button to add a new user.

Current Members of GROUP NAME

To see more information about an entry, click the CWS Login ID. To add group members, click the 'Add Members' button. To remove group members, select the members in the table, then click the 'Remove Selected Members' button at the bottom of the form.
NOTE: Italics indicate an alias which does not appear in CLUES.

Add Members

- 5) Specify the name or CWS ID to search for. Be sure to select “Name” or “CWS ID” as the search category. Then click [Search], and the results of your search will appear in a table.

Group Members - By Group (PROD)

Select the group whose members you wish to administer out of the list below.

GROUP NAME▼

Adding Members to GROUP NAME

Enter search information for the members to add, then click [Search].

For name searches, enter the last name, then the first name. You can search for multiple CWS Login IDs or Application IDs (up to 200) at once by separating them with spaces or tabs.

|devenney

Name

▼

Search Reset Clear

6) Click the "Select" button (right column) for the person you want to add.

To see more information about an entry, click the CWS Login ID.
 To add group members, select the members, then click the 'Add Selected Members' button.
 NOTE: Italics indicate an alias which does not appear in CLUES.

CWS Login ID	Name	Affiliation Description	Organization Code	Organization	Action
DevenBN	DeVenney Brianne	Caterpillar Employee	PR	CAT INC.,CORPORATE OFFICES	<input checked="" type="checkbox"/> Select

7) Click the "Submit" button below the table.

8) Confirm this change. The person's group membership will be updated and a list of all members in the group will be displayed.

9) If adding an Owner or Administrator, then click the "By Group" link under "Owners" to the left. A group drop down selection will appear.



Members

[By Group](#)
[By Person](#)

Owners

[By Group](#) ←
[By Person](#)

10) Choose the group you want to add administration/owner users to from the drop down selection. A list of current users in that group will appear.

Group Owners - By Group (PROD)

Select the group whose owners you wish to administer out of the list below.

11) Select the "Add Owners" button to add a new user.

Current Owners of GROUP NAME

To see more information about an entry, click the CWS Login ID. To add group owners, click the 'Add Owners' button. To remove group owners, select the owners in the table, then click the 'Remove Selected Owners' button at the bottom of the form.
NOTE: Italics indicate an alias which does not appear in CLUES.

12) Specify the name or CWS ID to search for. Be sure to select "Name" or "CWS ID" as the search category. Then click [Search], and the results of your search will appear in a table.

Group Owners - By Group (PROD)

Select the group whose owners you wish to administer out of the list below.

GROUP NAME

Adding Owners to GROUP NAME

Enter search information for the owners to add, then click [Search].

For name searches, enter the last name, then the first name. You can search for multiple CWS Login IDs or Application IDs (up to 200) at once by separating them with spaces or tabs.

13) Click the "Select" button (right column) for the person you want to add.

To see more information about an entry, click the CWS Login ID.
To add group owners, select the owners, then click the 'Add Selected Owners' button.
NOTE: Italics indicate an alias which does not appear in CLUES.

CWS Login ID	Name	Affiliation Description	Organization Code	Organization	Action
DevenBN	DeVenney Brianne	Caterpillar Employee	PR	CAT INC.,CORPORATE OFFICES	<input checked="" type="checkbox"/> Select

14) Click the "Add Selected Owners" button below the table.

15) Confirm this change. The person's group owner membership will be updated and a list of all owners of the group will be displayed.

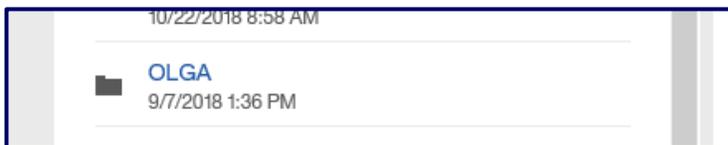
6.3 Accessing a PowerPlay Cube

- 1) Open Internet Explorer
 - a. Ensure Compatibility View is enabled to allow full functionality
- 2) Go to web page: <https://cognosanalytics.cat.com>

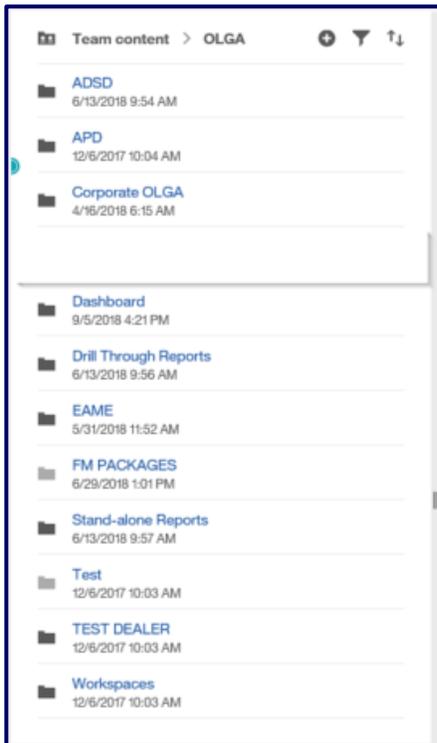
- 3) Click on **Team Content**



- 4) Select **OLGA**



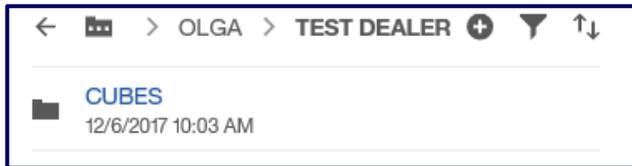
- 5) Select APD, EAME or ADSD for the Dealer's region



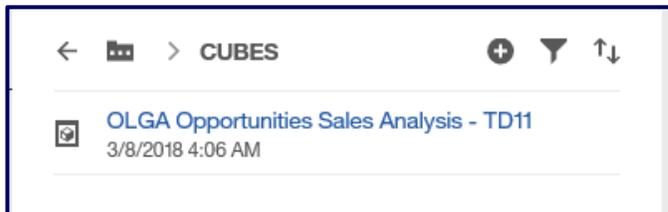
6) Select Dealer Name folder



7) Select **CUBES**



8) Click on the OLGA Opportunity Sales Analysis hyperlink to open the Cube. (This will open the cube in Powerplay in a new tab)



6.4 Cognos PowerPlay Cube

The Cognos PowerPlay Cube offers great flexibility in analysis and reporting. There are a number of functions that can aid the user in structuring the data in the most appropriate way to meet their needs. There are two options for how to filter/adjust data in PowerPlay. There is the option to use the left side list or the filters on the top that move across horizontally.

The screenshot shows the OLGA software interface. On the left is a 'Level Selector Areas' tree with categories like Date, Dealer Info, Customer Group, etc. The main area displays a data table for 'Past Rolling 12 Months' with columns for Sales Total, Opportunity Total, Percentage, # of Sales Events, and # of Opportunity Events. A 'Dimension Line' is shown above the table with various filters. A 'Tool Bar' is at the bottom with icons for different views and functions.

MEASURES as values	Sales Total	Opportunity Total	Percentage	# of Sales Events	# of Opportunity Events
2015/Jan	2,261,373	4,837,500	46.7%	2,744	1,750
2015/Feb	2,559,182	3,524,350	72.6%	2,940	1,734
2015/Mar	2,668,963	4,732,440	56.4%	3,029	1,816
2015/Apr	3,567,288	3,403,785	104.8%	3,751	1,655
2015/May	1,960,026	2,412,508	81.2%	2,270	1,572
2015/June	1,420,490	3,692,732	38.5%	1,523	1,665
2015/July	510,186	2,835,752	18.0%	811	1,552
2015/Aug	794,632	4,092,794	19.4%	1,186	1,795
2015/Sept	793,884	3,711,294	21.4%	922	1,620
2015/Oct	853,653	3,904,871	21.9%	950	1,739
2015/Nov	804,542	3,821,452	21.1%	881	1,742
2015/Dec	583,656	4,556,796	12.8%	975	1,868
Past Rolling 12 Months	18,777,875	45,526,273	41.2%	21,982	20,508

Tool Bar:

This diagram shows the tool bar with callouts for each icon: Cross-Tab, Chart, Display Options, Swap, Hide/Show, Calculation, Rank, Zero Suppression, 80/20 Suppression, Exceptions, Custom Subset, Drill Through, File, and Help.

Tool Bar Descriptions:

Cross-Tab – Option to view data in standard (default) cross-tab view or indented cross-tab view.

Chart – Allows user to change data from cross-tab format to a graph. Also contains chart options.

Display Options – Allows the users additional display options for viewing their data.

Swap – By selecting the Swap button, this moves the current row headings to column headings and the current column headings to row headings.

Hide/Show – Option to hid or show certain rows in the cube display.

Calculation – Provides the user options to make some simple calculations in the PowerPlay Cube. Refer to [Section 6.4.7 - How to Perform Calculations in Power Play](#)

Rank – Provides a way to rank or sort information.

Zero Suppression – Eliminates any line items that have values of all zero. Option to suppress rows only, columns only or values that have been divided by zero, missing values, have an overflow of values or zero values.

80/20 Suppression – Removes rows or columns whose absolute values do not contribute to the top 80% of results.

Exceptions – User can emphasize specific data by defining custom exception highlighting rules.

Custom Subset – Refer to the PowerPlay Help for more information. This subset can be based on any of the dimensions listed in PowerPlay. This options is best used when wanting to narrow down focus on one or two dimensions. To retrieve the Customer Subset, click on the Find icon and search for title of subset. When data is refreshed, the subsets will show the refreshed data.

Drill Through – A drill through report is available either by customer, equipment, opportunity, and sales. This option provides a more detailed report (similar to the OLGA web application).

File – To export data from Cognos, there are several options: PDF, CSV, Excel 2002 (.XLS), and Excel 2007 (.XLSX). The “Prepare a Bookmark” option allows the user to share their report with other users by providing the URL.

Help – The most important icon on the toolbar. Help provides the user with a complete manual of all the steps and process for displaying the data in PowerPlay. There is also the Find icon where custom subset data can be found.

Next are details on how to undertake some common data displays and manipulation processes in COGNOS.

6.4.1 Purpose of Cognos PowerPlay

Do's

- Use for metrics
- Use for analysis
 - Where should I focus?
- Use drill through report for detail

- Keep report layout simple
- Turn on status bar
 - Right click in header
 - Check to see if Cognos is “thinking”

Don'ts

- Get too detailed
 - e.g. Serial Number level
- Try to pull everything
- Add too many different dimensions
- Try to do multiple things at the same time

6.4.2 How to Filter Down or Expand Data in PowerPlay

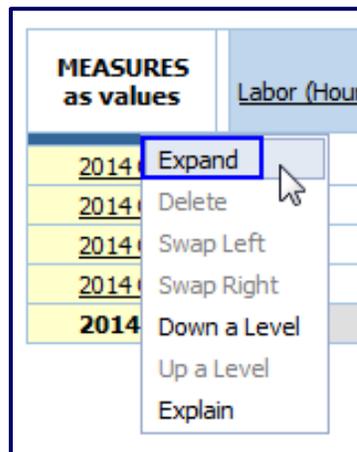
Data in PowerPlay is layered and users can drill down or expand data to a lower level of detail. For example, the view of OLGA has the past 12 months as the rows and the measures as the columns.

MEASURES as values	Labor (Hours) - Sales	Labor (Hours) - Opportunities
	<u>2015/Jun</u>	6,628
<u>2015/Jul</u>	7,486	10,018
<u>2015/Aug</u>	7,360	12,033
<u>2015/Sep</u>	11,611	8,985
<u>2015/Oct</u>	5,956	7,422
<u>2015/Nov</u>	5,078	9,107
<u>2015/Dec</u>	2,669	8,042
<u>2016/Jan</u>	3,713	10,331
<u>2016/Feb</u>	4,014	8,833
<u>2016/Mar</u>	3,749	10,776
<u>2016/Apr</u>	2,229	10,330
<u>2016/May</u>	2,178	11,697
Past Rolling 12 Months	62,671	119,209

You can choose to change the time frame by using the Date dimension options. For example, if you use a year such as 2016, then you will see the time period as a layer of Year, Quarter, and Month. Clicking on any of the items will drill down the data to the next layer (Month) for that year.

MEASURES as values	Labor (Hours) - Sales	Labor (Hours) - Opportunities
2014 Q 1	NA	NA
2014 Q 2	19,146	9,624
2014 Q 3	27,481	35,309
2014 Q 4	41,089	31,109
2014	87,716	76,041

Alternatively, the user can use the *Expand* or *Down a Level* functions. The user can right click on the level selector area immediately above the first row (or the little bar immediately to the left of the first column) and right click. This will bring up the below menu.



Selecting *Expand* keeps all of the years and adds another level for the next layer of data (quarter). *Expand* could be used a second time to also show the months.

MEASURES as values		Labor (Hours) - Sales	Labor (Hours) - Opportunities
2014 Q 1	2014/Jan	NA	NA
	2014/Feb	NA	NA
	2014/Mar	NA	NA
	2014 Q 1	NA	NA
2014 Q 2	2014/Apr	NA	NA
	2014/May	NA	NA
	2014/Jun	19,146	9,624
	2014 Q 2	19,146	9,624
2014 Q 3	2014/Jul	11,332	11,457
	2014/Aug	8,697	14,160
	2014/Sep	7,451	9,692
	2014 Q 3	27,481	35,309
2014 Q 4	2014/Oct	10,703	12,049
	2014/Nov	15,246	9,685
	2014/Dec	15,140	9,376
	2014 Q 4	41,089	31,109
2014	87,716	76,041	

Selecting *Down a Level* shows the next level of data without keeping the previous level. This is handy if the user does not want multiple columns of row labels and wants to show the data for all years at a lower level of detail.

MEASURES as values	Labor (Hours) - Sales	Labor (Hours) - Opportunities
2014/Jan	NA	NA
2014/Feb	NA	NA
2014/Mar	NA	NA
2014/Apr	NA	NA
2014/May	NA	NA
2014/Jun	19,146	9,624
2014/Jul	11,332	11,457
2014/Aug	8,697	14,160
2014/Sep	7,451	9,692
2014/Oct	10,703	12,049
2014/Nov	15,246	9,685
2014/Dec	15,140	9,376
2014	87,716	76,041

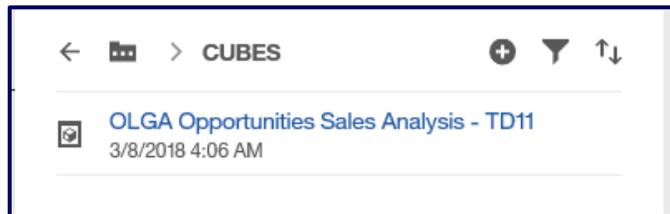
6.4.3 How to Return to a Previous View in PowerPlay

If a user wishes to return to a previous view in PowerPlay, they can simply select the back icon in their web browser. This is helpful if a mistake is made – the user does not need to start again but can simply return to the previous view.



6.4.4 How to Return to the Default View in PowerPlay

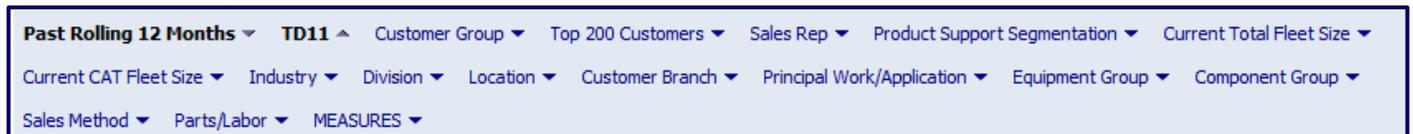
After manipulating data in PowerPlay, if the user wishes to return to the default screen, simply select the original tab on your browser where you originally selected the cube. From there the user can select the cube again and it will open to the default view.



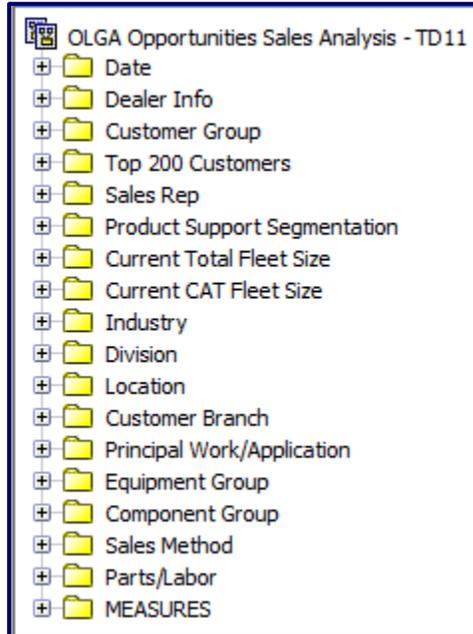
6.4.5 How to Change the Column or Row Dimension in PowerPlay

The default view in the PowerPlay cube is the data measures (columns) by the time period (rows). At the top of the screen and also in the list on the left hand side of the screen are all of the other data dimensions.

Dimension Line:



Dimension Viewer:



The user can click on any of these dimensions, hold the mouse down and drag it over the top of the existing row or column labels to replace.

While the mouse is hovered over the existing headings, the color will change to black. Release the mouse button when the headings are black and the headings will be replaced with the new dimensions selection.



Alternatively, a new dimensions can be added to the existing row or column dimension in the same way. The only difference is that the mouse should be moved to just underneath the row or column headings. A black bar will show underneath, release the mouse at this point.



The result will be multiple column (or row) heading dimensions. For example, showing the Product Support Segments under the measures.

Sales Total as values	Sales Total					Sales Total
	Do It For Me	Do It Myself	Unknown	Work With Me	Product Support Segmentation	
<u>2015/Jun</u>	304,950	1,070,981	737,979	147,463	2,261,373	2,261,373
<u>2015/Jul</u>	541,677	694,358	1,170,811	152,337	2,559,182	2,559,182
<u>2015/Aug</u>	398,127	785,370	1,425,482	59,984	2,668,963	2,668,963
<u>2015/Sep</u>	681,579	1,071,220	1,199,047	615,441	3,567,288	3,567,288
<u>2015/Oct</u>	309,135	582,121	956,636	112,134	1,960,026	1,960,026
<u>2015/Nov</u>	368,315	200,596	810,223	41,356	1,420,490	1,420,490
<u>2015/Dec</u>	138,103	106,299	259,119	6,664	510,186	510,186
<u>2016/Jan</u>	106,826	79,675	597,037	11,095	794,632	794,632
<u>2016/Feb</u>	220,367	90,264	480,380	2,874	793,884	793,884
<u>2016/Mar</u>	136,547	121,280	561,083	34,743	853,653	853,653
<u>2016/Apr</u>	194,412	168,186	438,490	3,454	804,542	804,542
<u>2016/May</u>	132,611	103,820	346,188	1,037	583,656	583,656
Past Rolling 12 Months	3,532,649	5,074,169	8,982,475	1,188,582	18,777,875	18,777,875

6.4.6 How to Hide Rows or Columns in PowerPlay

To hide a row or column in PowerPlay, left click on the column to be hidden and click on the Hide Selection.

MEASURES as values	Sales Total	Opportunity Total	Percentage	# of Sales Even	
2015/Jun	2,261,373	4,837,500	46.7%	2,7	
2015/Jul	2,559,182	3,524,350	72.6%	2,9	
2015/Aug	2,668,963	4,732,440	56.4%	3,0	
2015/Sep	3,567,288	3,403,785	104.8%	3,7	
2015/Oct	1,960,026	2,412,508	81.2%	2,2	
2015/Nov	1,420,490	3,692,732	38.5%	1,523	1,665
2015/Dec	510,186	2,835,752	18.0%	811	1,552
2016/Jan	794,632	4,092,794	19.4%	1,186	1,795
2016/Feb	793,884	3,711,294	21.4%	922	1,620
2016/Mar	853,653	3,904,871	21.9%	950	1,739
2016/Apr	804,542	3,821,452	21.1%	881	1,742
2016/May	583,656	4,556,796	12.8%	975	1,868
Past Rolling 12 Months	18,777,875	45,526,273	41.2%	21,982	20,508

In this example, the # of Sales Events column is no longer necessary and is being hidden. If you need to hide more than one row/column, you can select Hide/Show. This can also be used to show a previously hidden value.

6.4.7 How to Perform Calculations in Power Play

In some cases it can be helpful to perform calculations within the PowerPlay Cube. For example, if running analysis of mining vs non-mining customers. The non-mining customers can be aggregated by summing the totals of all the industries other than mining.

To do this, first drag the industries into either the rows or the columns. Then right click on one of the industries. A pop-up window will show, select **Insert Calculation**.

MEASURES as values	Sales
-	
- UNKNOWN	27,5
AG - AGRICULTURE	
CS - COMMERCIAL SE	1,3
EQ - EQUIPMENT SER	1,5
FY - FORESTRY	1,7
GV - GOVERNMENT (P	1,3
IM - INDUSTRIAL	1,7
LG - LARGE CONTRAC	1,7
LL - LOCAL CONTRACTORS	15,1
MA - MARINE (ENGINE)	1
MN - MINING	14,4
PE - OIL & GAS (ENGINE)	2
PL - PIPELINE	3
QA - QUARRY & AGGREGATES	5,2
ST - SURFACE TRANS SVCS (ENGINE)	7,7
WA - WASTE	1,8
Industry	128,4

The calculation popup will show this:

In this case, change the default operation type of Analytic and the default operation to Rollup. Enter a name for the new calculated field and select the Movable check box (this allows moving of the category in the cube). Then highlight all of the categories except Mining by holding down the Ctrl key and clicking on each of the categories. Select **OK**.

There will be a non-mining category.

<i>non-mining</i>	5,349,773	NA	NA	16,920	NA
- UNKNOWN	1,863,337	1,248,557	149.2%	4,504	577
AG - AGRICULTURE	3,410	NA	NA	32	NA

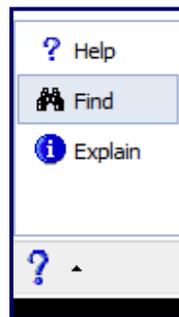
The Analytic Rollup calculation is very important because it will properly recalculate any POPS values. Using a straight Add function would add the POPS values between the categories and provide an incorrect value.

Other simple calculations can be performed but you should always verify that the calculation has been done correctly.

6.4.8 How to Find a Record in PowerPlay

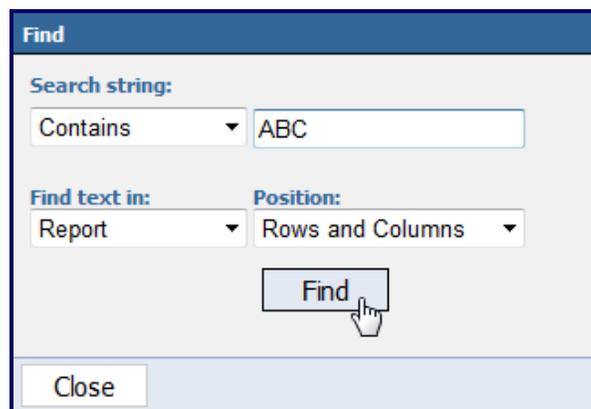
If a user has a long list of rows in the cube and wishes to find a particular record, the **Find** function can be used.

For example, the user is interested in finding data only for one customer, assuming each row is a customer. Select the carrot next to the “?” and click on **Find**.



The **Find** popup window is where the user can type in search characters and then select **Find**.

Note that “Find Text In” has two options: Report & Cube. Report only searches what is displayed in the current report view. Cube searches the entire Cube.



The matching records based on the search criteria will be returned. The user can then select either Go To or Filter:

- **Go To** – Will take the user to the page on which the selected value is shown on.
- **Filter** – Will filter the cube view to just the selected record.

Category:	Path:
ABC TRADING - 000101	
BABCOCK HITACHI PHILS. INC. - 000769	
BRP SALVADOR ABCEDE (PG114), LCF, PHIL. FLEET - 410405	
GOLDEN ABC, INC. - 203110	
PABCA ENTERPRISES - 210425	

Go To Filter

6.4.9 How to Export a Report in PowerPlay

The user can export a report to Excel by clicking on the File button in the toolbar at the bottom of the page. Select the version of Excel, CSV, or PDF.

Note that the “Prepare Bookmark” option formats the URL in such a way that the user can share the link with other users.



6.4.10 PowerPlay Drill-Through Report

Users can view their data from the PowerPlay Cube through a drill through report. This allows the user to do a focused dive into the data supporting the values shown in the cube.

Example 1:

A user is interested in the opportunities for track excavators in January 2016 amongst Do-It-Myself customers.

Solution: The user can narrow down their selection by the following:

Equipment Group > Product Family by Cat Model > Machine > TEX – Track Excavators

Equipment Group	Contract Type	Component Group	Sales Method	Parts/Labor	MEASURES
Equipment Group	2	NA	4	NA	879,48
Product Family By CAT Model	Engine	NA	NA	NA	NA
Product Family By Dealer Model	Machine				
Equipment Current Age	4				
SMU Type	1				
0	NA	4			
NA	NA	1			
3,184	21,419	4			
NA	NA	2			

SR - STABILIZERS/RECLAIMERS

SSL - SKID STEER LOADERS

TEX - TRACK EXCAVATORS

TH - TELEHANDLER

TL - TRACK LOADERS

TTT - TRACK TYPE TRACTORS

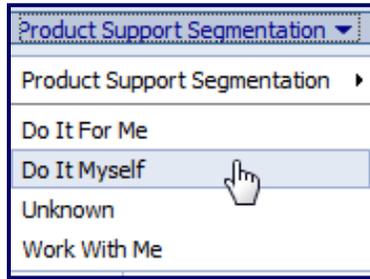
UML - UNDERGROUND MINING LOADERS



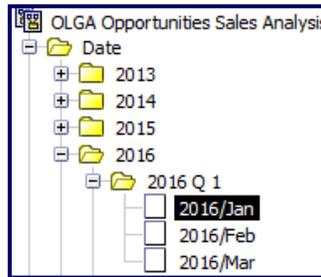
Best Practice: Hover over the Product Family by Cat Model category until the next data layer is shown, then hover over the machine category until the next data layer is shown. Then click on TEX – Track Excavators to make that selection.

6.4.10.1 How to Run a PowerPlay Drill Through Report

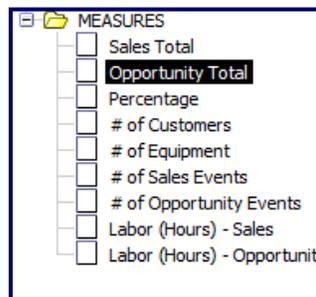
- 1) Select the Product Support Segment > Do It Myself



- 2) Select Date > 2016 > 2016 Q1 > 2016/Jan



- 3) Select Measures > Opportunity Total



- 4) The total opportunity value for the track excavator owned by Do It Myself customers in January 2016 is the following.

Opportunity Total as values	2016/Jan	2016/Jan
	Opportunity Total	
TEX - TRACK EXCAVATORS	8,351,167	8,351,167

- 5) To see the details of the opportunity, select the drill through reports that the user can select. There is one for Customer, Opportunities, Sales and Equipment.



- 6) By selecting a drill through, the user will see all information available in the OLGA web application narrowed down to the selection applied by the user within the PowerPlay Cube.

Name	Target
Drill_Through_Report_Customer	Public Folders > OLGA > Drill Through Reports > Drill_Through_Report_Customer
Drill_Through_Report_Equipment	Public Folders > OLGA > Drill Through Reports > Drill_Through_Report_Equipment
Drill_Through_Report_Opportunity	Public Folders > OLGA > Drill Through Reports > Drill_Through_Report_Opportunity
Drill_Through_Report_Sales	Public Folders > OLGA > Drill Through Reports > Drill_Through_Report_Sales

6.4.11 PowerPlay Stand-Alone Reports

Users can view their data from the PowerPlay Cube through one of two stand-alone reports. These reports provide different access to customers' OLGA POPS information. Note that both parts and labor are included in the values.

Customer and Sales Rep POPS Report

This report shows OLGA sales, opportunity, lost opportunity, and POPS for all included customers with optional filters for division, industry, and date range.

Customer and Sales Rep POPS Report by Parts Major Class

This report shows OLGA sales, opportunity, lost opportunity, POPS, and major class for all included customers with optional filters for division, industry, and date range. The addition of the major class categorization is the only difference between this report and the one listed in the previous section.

6.4.11.1 How to Run a PowerPlay Stand-Alone Report

1) Select Stand-Alone Reports



- 2) Select one of the two available reports
 - a. Customer & Sales Rep POPS
 - b. Customer & Sales Rep POPS by Major Class



- 3) Enter desired filter criteria & select “Finish”
 - a. **Note:** Always use a valid rolling 12 month date range for a correct POPS value

4) Save or Open the report in Excel

6.4.12 Top 200

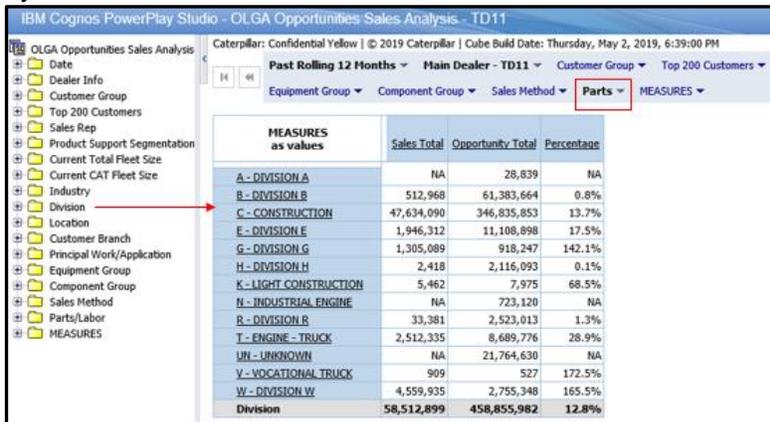
The Top 200 is a dealer and Cat agreed upon target account list. It has been called Top 200, target account, and many other things. The Top 200 dimensions are updated in the OLGA PowerPlay Cubes each month. Please **Jonatan Gomel (Gomel_Jonatan@cat.com)** for Top 200 inquiries as he is the collector and keeper of this list.

6.4.13 Tips & Tricks

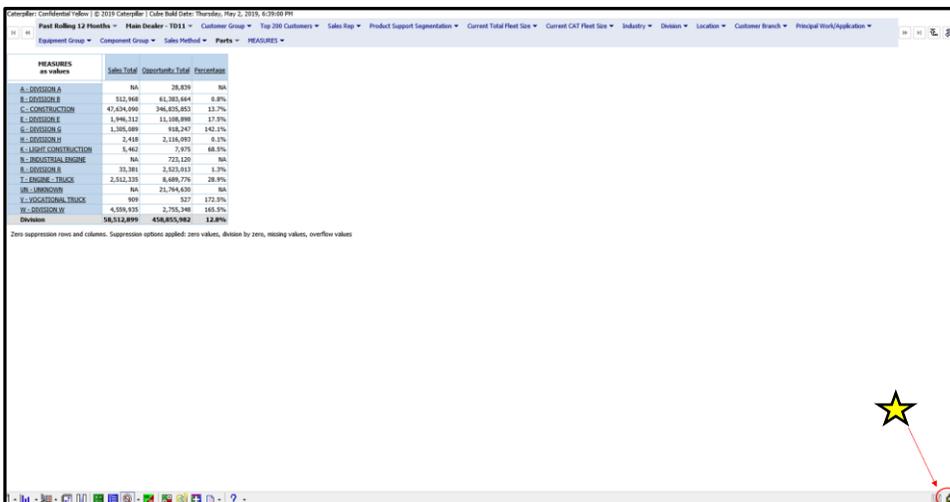
Create a View for Frequently Accessed Data: The Cognos application offers the flexibility to save views and reports for information you want to view regularly.

6.4.13.1 Create a view for frequently accessed information

- 1) Example: Go into the Cognos application, filter on parts (by left clicking at top dimension as shown) & slide division over into cube (by holding down left mouse button & dragging folder) to view POPS by Division



- 2) Note small discs icon in bottom right of screen. This is the 'save as' button-click to save view



- 3) The 'Save As' pop up box allows users to name the report (example: 'Dealer POPS by Division')

Save As
Specify a name and location for this entry.

Name:
Dealer POPS by Division

Description:
"your text here"

Screen tip:

Location:
None
[Select another location...](#) [Select My Folders](#)

OK Cancel

- 4) Save in desired folder to allow access to automatically access information & Click "OK"

Save As
Specify a name and location for this entry.

Name:
Dealer POPS by Division

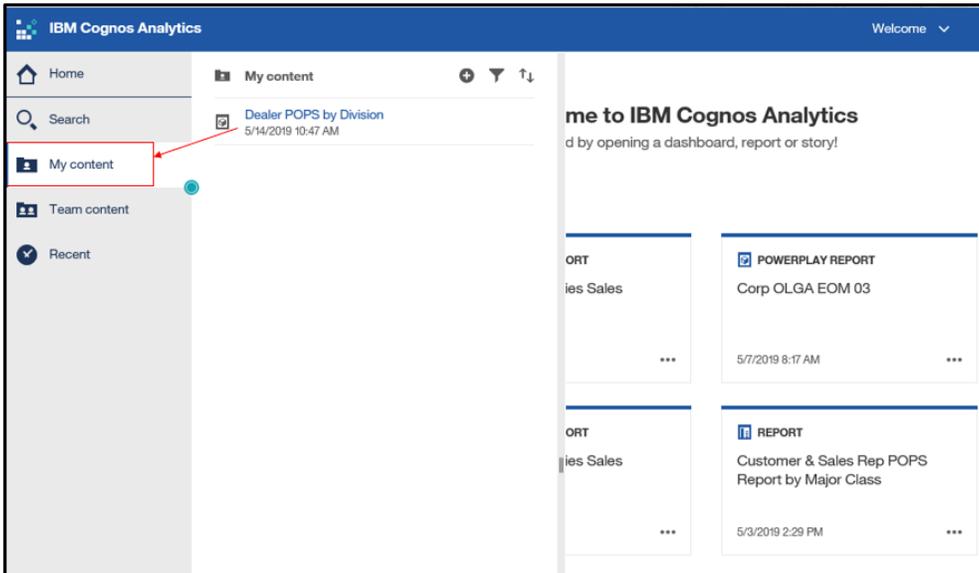
Description:
"your text here"

Screen tip:

Location:
My Folders
[Select another location...](#)

OK Cancel

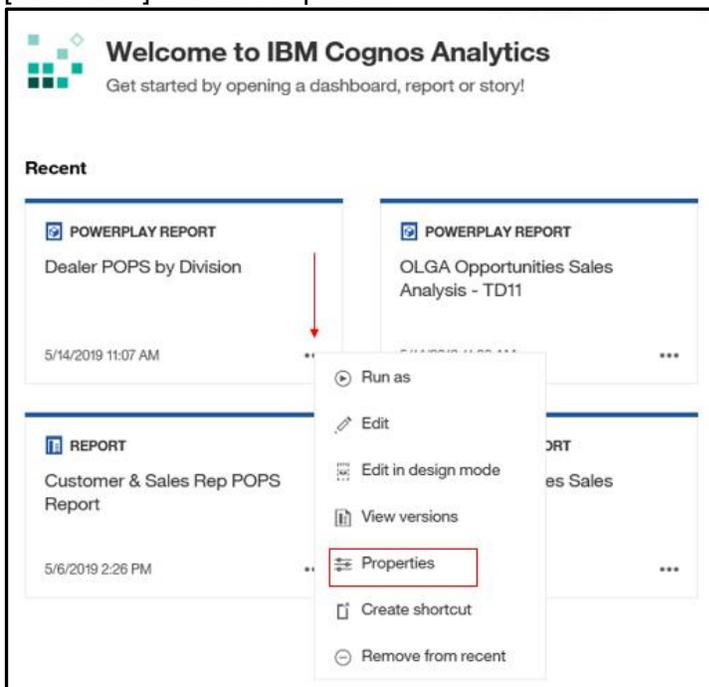
6.4.13.2 My Content: Advantage → Save time for commonly viewed information by clicking to open new session that takes user directly into Cognos showing previous/saved view



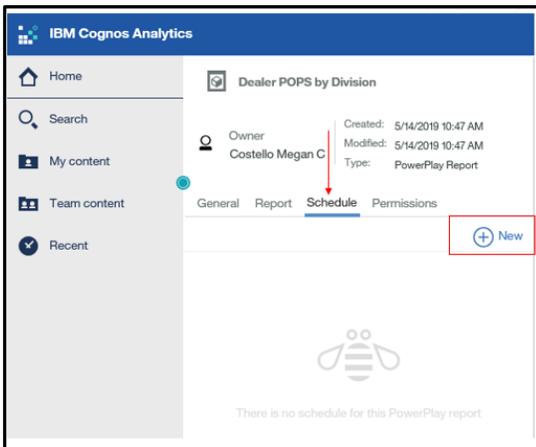
- 1) Example: Use for any common dimension/view preference (the view above is showcasing the previous example for Dealer POPS by Division saved view)

6.4.13.3 Scheduling Reports allows users to email reports to their own email address

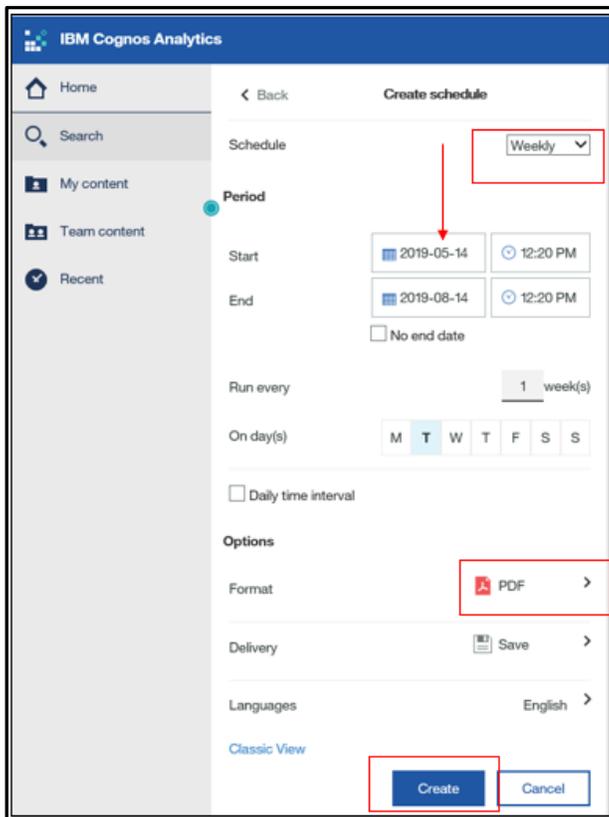
- 1) Example: Any reports you have saved will show on the dashboard (Cognos homepage) click 'More' [three dots] & then 'Properties'



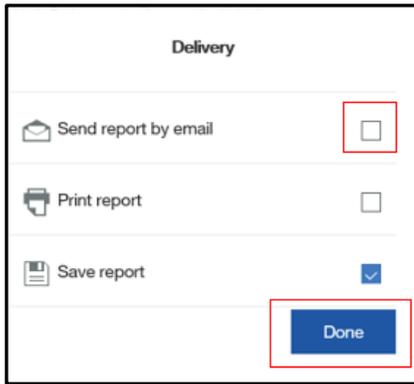
2) In secondary view: click tab 'Schedule' Select the 'New' button at right as shown below:



3) Select how often to run-(date/time) cadence *Output only available in pdf* & click create



4) Delivery options: save, print or send report by email and to whom by email address



5) Write a note if desired & click done



7. Turning Data into Action

The key value of OLGA is the predictive data regarding future repair events. Dealers should determine how their sales, service, marketing and product support departments use this data to drive parts and labor sales.

7.1 Practical Applications of OLGA Data

The practical applications of OLGA data should include:

- The Dealer's sales force analyzing upcoming opportunities for a customer's fleet before visiting or calling that customer.

Dealers should consider how they are going to provide OLGA leads to their sales team

- Via the CRM system or process
- Via direct access to OLGA
- Via data supplied from an administrator / gatekeeper

Other teams at the Dealership:

- The Dealer's service team using OLGA leads to drive inspections and determine required service work on customers' equipment.
- The Dealer's service team using OLGA to help in capacity planning.
- The Dealer's marketing team using OLGA data to identify areas of significant upcoming opportunity to develop campaigns and programs to target that opportunity.
- The Dealer's parts operations team using OLGA data to help identify upcoming parts stock requirements.

To discuss these applications of OLGA data, contact your Caterpillar DSD OLGA representative.

8. Support

Business Process, Marketing, & Configuration Support		
<p>Each Caterpillar Distribution Services Division (DSD) has OLGA Consultant(s) who are responsible for helping dealers implement and use OLGA. The DSD OLGA Consultants are listed below and are the first line of contact for questions regarding OLGA business processes and marketing, POPS-C information, implementation, and configuration/utilization of OLGA. The GASD OLGA Support contacts are in place to help dealers with more detailed system questions, data analysis, and project consulting.</p>		
ADSM	EAME	
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APD		
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9. Appendix

Appendix A: OLGA Web Application Filter Definitions

Web Application Filter	What is it?	Where does it come from?	What is Shown in Filter?	Example from Test Data?
Customer	Dealer Customer Name and Dealer Customer Number	Dealer Data - Customer interface - dealerCustNumber, dealerCustName	Dealer Data	Customer 3502845
Division	Dealer defined code for an organizational structure that identifies the line of equipment or a business unit within the Dealership	Dealer Data - Customer interface - divisionCode, divisionName	Dealer Data	A - Division A
Customer Industry	Master list of Cat industries. Dealer reported CIC codes are validated and mapped against Cat master list of Industries and CIC (customer industry codes). OLGA uses only the Primary Industry.	Dealer Data - Customer interface - industryCode, primaryIndustryCodeInd Caterpillar Data - Caterpillar Master List of Industries and CIC codes	Cat Data	AG - Agriculture CS - Commercial Services (Engine) Etc.
Sales Rep	Prioritization of Sales Reps for a given customer/division in OLGA	Dealer Data - Customer interface - SalesRep - number, name, type	Dealer Data	113 = SalesRep00630 - Machine 113 - SalesRep 00683 Product Support
Product Support Segmentation	Caterpillar's classification of customers based on the customer's POLS (percent of labor sales): Do It Myself: 0-30.99% Work With Me: 31-70.99% Do It For Me: 71-100%	Calculated by OLGA	Cat Data	
Product Family	All Caterpillar standard product families	Caterpillar Master Table	Cat Data	AG Tractors, Articulated Trucks, etc.
Model	Caterpillar standard model nomenclature	Caterpillar Master Table	Cat Data	320, 320B, M320, etc.

Serial Number Prefix	First 3 digits of the serial number	Dealer Data - Equipment Interface - mfrSerialNumber	Dealer Data	6HK, APX, etc.
Match Type	Type of match that OLGA creates between an opportunity and sales event. Match Types: Automated Manual Unmatched	Calculated by OLGA	Cat Data	Automated Match, etc.
Serial Number	Number assigned to a prime product by the manufacturer to uniquely identify the product from any other prime product	Dealer Data - Equipment Interface - mfrSerialNumber	Dealer Data	ERM00175, 6HK00549, APX00481, etc.
Parts Major Class	List of Caterpillar parts major classes	Caterpillar Master Table	Cat Data	1 - Undercarriage 2 - Engine 3 - Ground Engaging Tools 4 - Drive Train Parts 5 - Hydraulics 6 - Filters 7 - Maintenance 8 - Structural 9 - Unknown
Commercial Group	List of Caterpillar parts commercial groups	Caterpillar Master Table	Cat Data	DMC – DT Major Components HPS – Hardware-Pins-Seals-Bearings HNC – Hose and Couplings etc.
Principle Work Code	The three digit principle work code along with its description	Dealer Data - Equipment interface - pwc & Caterpillar Master Table of Principle Work Codes and Descriptions	Dealer Data with Cat Data descriptions	105 - Specialty Crops 110 - Crop Production 120 - Land Improvement 122 - Ponds, Terracing, & Watershed Construction etc.

Application Code	The one-digit application code along with its description	Dealer Data - Equipment Interface - appCode	Dealer Data with Cat Data descriptions	A – Primary Drive B – Pump C – Compressor D – Other Mechanical Drive E – Prime Power F – Standby Power G – Emergency Standby H – Cogeneration (CHP) J – Cooling M – Load Management N – Continuous (Base Load) P – Quality Power R – Mission Critical Standby S – Cat Branded Marine Controls T – Transmission X – Hybrid Transmission
Last Activity Date	This is based on the last time that the dealer updated/modified the equipment record in their ERP.	Dealer Data – Equipment interface	Dealer Data	Date/Time Stamp
State	Defined location of the customer based on the primary address. OLGA looks for the main address, site address, and then the billing address.	Dealer Data - Customer interface - state,addressType	Dealer Data	CA, CO, WI, etc.
County	Defines location within a state for main location of the customer. OLGA looks for the main address, site address, and then the billing address.	Dealer Data - Customer interface - county,addressType	Dealer Data	Clark, Cook, Dallas, etc.
Branch	Identifies the primary dealership store responsible for this customer	Dealer Data - Customer interface - primaryStoreNumber	Dealer Data	01 - Kingston, 02 - Queenstown, 03 - California, etc.

Contract	Defines if the opportunity is/was under contract	Dealer Data - Equipment interface - contractType	Dealer Data	Contract, No Contract
Utilization Rate Type	Designation of how the utilization rate was calculated	Caterpillar Master Table	Cat Data	Actual, Estimated, Standby Engine
Territory Dealer Code	Territory dealer branch code	Dealer Data - Customer interface - territoryCode	Dealer Data	Branch dealer codes -- B011, D242, L050, etc.
Component Code	Defines the component or system on a unit being serviced	Dealer Data - Work Order interface - Component Code & OLGA BUILDER Files	Dealer and Cat codes with Cat Data descriptions	1000 - Engine
Job Code	Indicates the type of work being performed on a component	Dealer Data - Work Order Data - Job Code & OLGA BUILDER Files	Dealer and Cat codes with Cat Data descriptions	010 - Remove & Install

Appendix B: OLGA COGNOS Cube Definitions

Cognos Dimension	What is it?	Where does it come from?
Date	Month & Year of the opportunity or sale	Either from: 1 - Dealer Data - Invoice 2 - Opportunity
Dealer Info	Dealer Code	Caterpillar Corporate Directory
Customer Group	All of the customers in OLGA -- Parent/Alphabetical Split	Dealer Data - Customer interface
Top 200 Customers	Indication if a customer is a Top 200 or target account (Y/N)	Caterpillar GASD marketing initiative
Sales Rep	Prioritization of Sales Reps for a given customer/division	Dealer Data - Customer interface
Product Support Segmentation	Caterpillar's classification of customers based on the customer's POLS (percent of labor sales): Do It Myself: 0-30.99% Work With Me: 31-70.99% Do It For Me: 71-100%	Calculated by OLGA
Current Total Fleet Size	Customer size based on the total number of included equipment a customer owns (or is reporting)	Dealer Data - Customer interface
Current CAT Fleet Size	Customer size based on included Cat equipment only	Dealer Data - Customer interface
Industry	Customer industries as assigned by the dealer based on the customer's CIC code	Dealer Data - Customer interface
Division	Dealer defined code for an organizational structure that identifies the organizational structure within the Dealership	Dealer Data - Customer interface
Location	Country, State, County, & zip code of the customer	Dealer Data - Customer interface
Customer Branch	Identifies the primary dealership store responsible for this customer	Dealer Data - Customer interface
Principle Work/Application	Principle work code and application code assigned to each serial number by the dealer	Dealer Data - Equipment file
Equipment Group	Product families & model of equipment -- Equipment by age & by SMU type and SMU range	Dealer Data - Equipment file
Component Group	Component groups and lower level codes	Either from: 1 - Caterpillar Master Table 2 - Dealer Data - Work Order & Opportunity

Sales Method	How the dealer transacted that sale with the customer (work order, over the counter, part store, integrated procurement, etc.)	Dealer Data - Invoice file
Parts/Labor	List of Caterpillar parts major classes	Caterpillar Master Table
Measures	Different values in the cube (% is POPS/POLS/total), Labor Hours, Average	Calculated by OLGA

Appendix C: Job Code Cross-References for Matching (Section 3.5)

Job Code	Job Code Description	Job Code Group
000	COMBINED REPAIR TIME (WARRANTY)	020
001	REPAIR FOR WARRANTY	020
002	TRANSFER COMPONENTS TO/FROM	002
003	REMOVE, REPAIR FOR WARRANTY, INSTALL	020
004	WIRE TO/FROM	004
005	SALVAGE	005
006	PROGRESSIVE ASSEMBLY RECONDITION	020
007	RECONDITION AFTER FAILURE	020
008	TAKE & ANALYZE S-O-S SAMPLE FROM	008
009	LIFT, BLOCK & LOWER	009
010	REMOVE & INSTALL	010
011	REMOVE	010
012	INSTALL	010
013	REPLACE WITH EXCHANGE	020
014	REPLACE GASKET/RESEAL	014
015	DISASSEMBLE	015
016	ASSEMBLE	020
017	DISASSEMBLE & ASSEMBLE	020
018	TURN/REPOSITION	018
019	RECONDITION BEFORE FAILURE	020
02A	RECONDITION WITH LEVEL 1 PARTS	020
02L	RECONDITION WITH CLASSIC PARTS	020
020	RECONDITION	020
021	RECONDITION FOR EXCHANGE	020
022	REMOVE, RECONDITION, INSTALL	020
023	REPAIR	020
024	ALIGN	024
025	ADJUST	025
026	RECONDITION IN FRAME	020
027	ORIGINAL INSTALLATION	027
028	REBEARING & RESEAL	028
029	SEPARATE & CONNECT	029
030	TEST AFTER REPAIR	081
031	DYNAMOMETER TEST	081

032	HYDRAULIC TEST	081
033	LOAD BANK TEST	081
034	CRACK/LEAK TEST	081
035	TROUBLESHOOT	035
036	TEST/CHECK & ADJUST	081
037	REMOVE, CLEAN & INSTALL	037
038	DIAGNOSTIC TEST	081
039	REMOVE, TEST, ADJUST, INSTALL	081
040	INSPECT	040
041	PERFORM MAINTENANCE ON	540
042	INSPECT & MAINTAIN	040
043	APPRAISE	043
044	DRAIN & REFILL	044
045	CHARGE	045
046	FLUSH	046
047	TUNE-UP	047
048	START	048
049	HONE	049
050	PRE-DELIVER	050
051	DELIVER	051
052	TRANSPORT	052
053	DEMONSTRATE	053
054	REVISIT	054
055	LOAD/UNLOAD	055
056	TRAVEL TO/FROM	056
057	CLASSROOM TRAINING	057
058	WAIT	058
059	CUT OFF & WELD ON	059
060	TRIM	060
061	FABRICATE	061
062	WELD	062
063	MACHINE/GRIND/MILL	063
064	REAM/BORE/DRILL	064
065	METALLIZE	065
066	AUTOMATIC WELD	066
067	SEMIAUTOMATIC WELD	067
068	STRAIGHTEN	068
069	REINFORCE	069

070	CLEAN	070
071	REMOVE PAINT FROM	071
072	PAINT	072
073	TOUCH-UP	073
074	WASH	074
075	PACKAGE	075
076	SEPARATE	076
077	CONNECT	077
078	FASTEN	078
079	TORQUE	079
080	POLISH	080
081	TEST	081
082	MEASURE	082
083	COUNTERBORE	083
084	TILT	084
085	CHROME PLATE	085
086	LUBRICATE	086
087	PREPARE DYNAMOMETER TEST	087
088	PREPARE LOAD BANK TEST	088
089	INTERVIEW CUSTOMER ABOUT	089
500	LABOR EXCEEDING TRG	500
501	TRG OVERTIME	501
502	SHARPEN	502
503	PRINT	503
504	CONFIGURE	504
505	CONTAIN	505
506	RAISE	506
507	CUT & ANALYZE	507
508	LIFT & BLOCK	508
509	LOWER	509
510	REPLACE	020
511	REPLACE WITH NEW	020
513	REPLACE WITH CAT REMAN	020
515	REGENERATE	515
517	FIT & SHIM	517
518	ROTATE	518
520	OVERHAUL	520
522	REMOVE, RECONDITION BEFORE FAILURE & INSTALL	020

523	REMOVE, RECONDITION AFTER FAILURE & INSTALL	020
524	CALIBRATE	524
525	LOOSEN & TIGHTEN	525
526	LOOSEN	526
527	TIGHTEN	527
528	REPLACE BUSHING/BEARING	528
529	SET	529
530	ROAD TEST	081
531	TIME	531
532	VIMS TEST	081
535	CHECK	535
536	RUN	536
538	ADD	538
539	CUSTOMER PERFORMS	539
540	PERFORM	540
541	EVACUATE & SAVE	541
542	PURGE	542
543	DRAIN	543
544	REFILL	544
545	RECEIVE	545
546	IDENTIFY	546
547	VACUUMIZE	547
548	PRIME	548
549	KNURL	549
550	COMPRESS	550
551	MOVE	551
552	TOW	552
553	RELEASE	553
554	OBTAIN	554
555	UNLOAD	555
556	LOAD	556
557	SUPPLY PARTS	557
558	RESHELL	558
560	CUT	560
561	RECYCLE	561
569	DRY	569
570	STEAM CLEAN	570
571	CLEAN & INSPECT	571

572	OPEN	572
573	CLOSE	573
574	VACUUM	574
575	SHRINK WRAP	575
576	RECOVER	576
577	UNPACK	577
578	UNPACK & PACK	578
580	SPECIAL CLEAN	580
581	MEGATEST	081
587	SET UP	587
590	MODIFY	590
591	REPROGRAM	591
595	PERFORM PRODUCT UPDATE ON	595
596	PERFORM EPA EMISSIONS TEST ON	081
597	EVACUATE & CHARGE	597
600	ACTIVATION	600
601	DEACTIVATION	601
787	REWORK	787
805	BATCH SALVAGE	805
807	BATCH RECONDITION AFTER FAILURE	020
815	BATCH DISASSEMBLE	815
816	BATCH ASSEMBLE	816
817	BATCH DISASSEMBLE & ASSEMBLE	817
819	BATCH RECONDITION BEFORE FAILURE	020
820	BATCH RECONDITION	020
821	BATCH RECONDITION FOR EXCHANGE	020
825	BATCH ADJUST	825
830	BATCH PERFORMANCE TEST	081
840	BATCH INSPECT	840
844	BATCH DRAIN & REFILL	844
848	BATCH TUNE-UP	848
849	BATCH HONE/KNURL	849
852	BATCH TRANSPORT	852
863	BATCH MACHINE/GRIND/MILL	863
865	BATCH METALLIZE	865
868	BATCH STRAIGHTEN	868
870	BATCH CLEAN	870
872	BATCH PAINT	872

874	BATCH WASH	874
875	BATCH PACKAGE	875
880	BATCH POLISH	880

Glossary

Acronyms Glossary

Acronym	Full Name
ACAM	Asia-Pacific, CIS, Africa, Middle East Division
AED	Americas & Europe Division
AMD	Authorized Marine Dealer
ASSC	Authorized Sales & Service Center
CDDW	Caterpillar Digital Data Warehouse
CIS	Commonwealth of Independent States (including Russia, Ukraine, etc.)
CRM	Customer Relationship Manager
CSA	Customer Support Agreements
CWS	Corporate Web Security
DBS	Dealer Business System
DCAL	Dealer Customer Acceptance Level
DDIP	Dealer Data Integrity Process
DEAC	Diesel Engine Antifreeze Coolant
DEO	Diesel Engine Oil
DNS Address	Domain Name System Address
DSD	Distribution Services Division
ECM	Electronic Control Module
EMS	Equipment Management Solutions
ERP	Enterprise Resource Planning
ETL	Extract, Transform, & Load Process
FAQ	Frequently Asked Questions
GASD	Global Aftermarket Solutions Division
Hrs	Hours
ISD	Industrial Service Distributor
ISO	International Organization for Standardization
ISR	Inside Sales Representative
IT	Information Technology
KAM	Key Accounts Manager
MARC	Maintenance and Repair Contracts
OLGA	Opportunity Lead Generation Analyzer
POLS	Percent of Labor Sales
POPS	Percent of Parts Sales
POPS-C	Percent of Parts Sales - Caterpillar
PSSR	Parts Service Sales Representative

PTOS	Product Tracking & Opportunity System
SFTP	Secure File Transfer Protocol
SI Mailbox	Sterling Integrator Mailbox
SIMS	Service Information Management System
SMCS	Service Management Control System
SMU	Service Meter Unit
SN	Serial Number
SNP	Serial Number Prefix
SOS	Source of Supply
TEPS	Truck Engine Product Support
UOM	Unit of Measure
UR	Utilization Rate
WO	Work Order
XML	Extensible Markup Language