Version 25 | Trapeze Enterprise Asset Management

FluidFocus

Administrator Guide

Trade Secret | February 2025

Technical Support

Trapeze provides several ways to connect with the Customer Care team. Please provide detailed information to the representative. If you are reporting an issue by e-mail, include any error messages, screen shots of your problem, and steps to replicate the issue.

Customer Care is available Monday through Friday, 8:00 a.m. to 8:00 p.m., Eastern Standard Time.

Toll-Free Telephone:	1-877-411-8727
E-mail:	cc@trapezegroup.com
FTP Site:	https://ftps.trapezegroup.com/
Web Site:	https://collaborate.trapezegroup.com

The website provides access to Trapeze Collaborate which offers resources to implement and operate the software, search knowledge, participate in communities, log/track service requests, sign-up for release alerts, view product health recommendations, and download updates or documentation. For secure access to Collaborate, contact Customer Care through the website or by calling the number above.

Product Compatibility

Refer to the latest Product Compatibility information on Trapeze Collaborate for requirements including operating system information, databases, Crystal reports, network protocol, HTTP servers and browsers that are supported.

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Contents

1. Overview

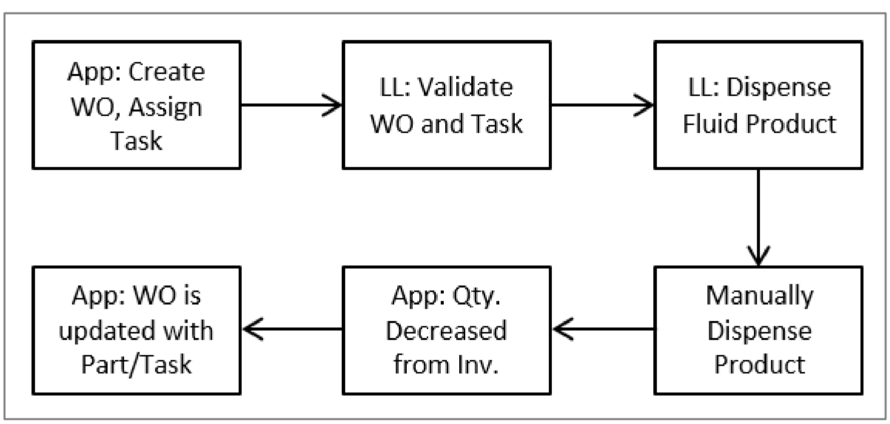
Managing fluids and lubricants within a maintenance facility can be very complicated when done manually on the shop floor. FluidFocus management software integrates with Lincoln Industrial’s LFC 5000 and LFC 6000 Fluid Control Systems so that all activities related to the storage and dispensing of fluids and lubricants are managed within FluidFocus to streamline shop floor operations. This two-way integration allows technicians to treat consumable goods in a similar fashion to how they handle parts. Dispense events are captured instantly and automatically to eliminate manual entry and errors. These events and costs are attached to work orders where they are available for all management tasks, including historical reporting. As this consumable inventory is dispensed, the shop inventory is updated in real time so that fleet managers know when to place reorders.

This document is intended to walk through the setup, configuration, and testing of the FluidFocus and LincolnLube Integration using the following sections.

- Prerequisites
- FluidFocus Configuration
- LincolnLube Configuration
- Preliminary Testing
- Entering transactions into LincolnLube
- Error examples

Integration Process Summary

The below image shows the flow of the integration process.

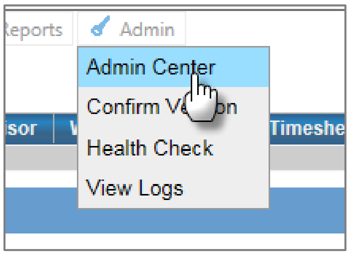


License Key Setup

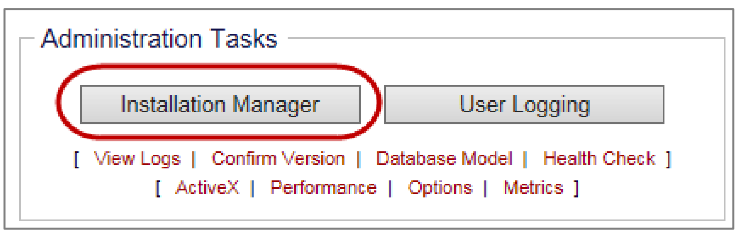
Confirm that the FluidFocus installation key has been entered on the portal Admin Center.

To confirm the installation key is set up:

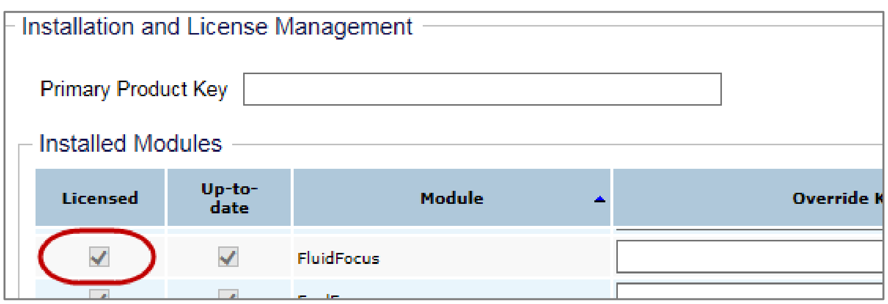
1. Open the Web Modules application.
2. In the top-left corner, click **Admin**.



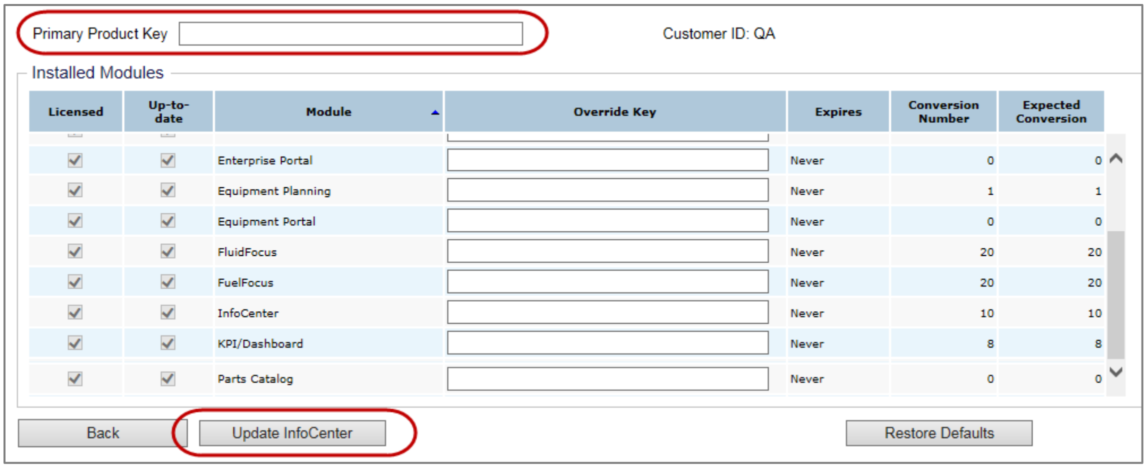
3. Click Admin Center.
4. Click Installation Manager.



5. Ensure the FluidFocus module **Licensed** checkbox is checked.



6. Type the product key into the **Primary Product Key** field and click **Update InfoCenter**.


Primary Product Key
Customer ID: QA
Installed Modules
Licensed
Up-to-date
Module
Override Key
Expires
Conversion Number
Expected Conversion
Enterprise Portal
Never
0
0
Equipment Planning
Never
1
1
Equipment Portal
Never
0
0
FluidFocus
Never
20
20
FuelFocus
Never
20
20
InfoCenter
Never
10
10
KPI/Dashboard
Never
8
8
Parts Catalog
Never
0
0
Back
Update InfoCenter
Restore Defaults

2. Setup and Configuration

Background Setup

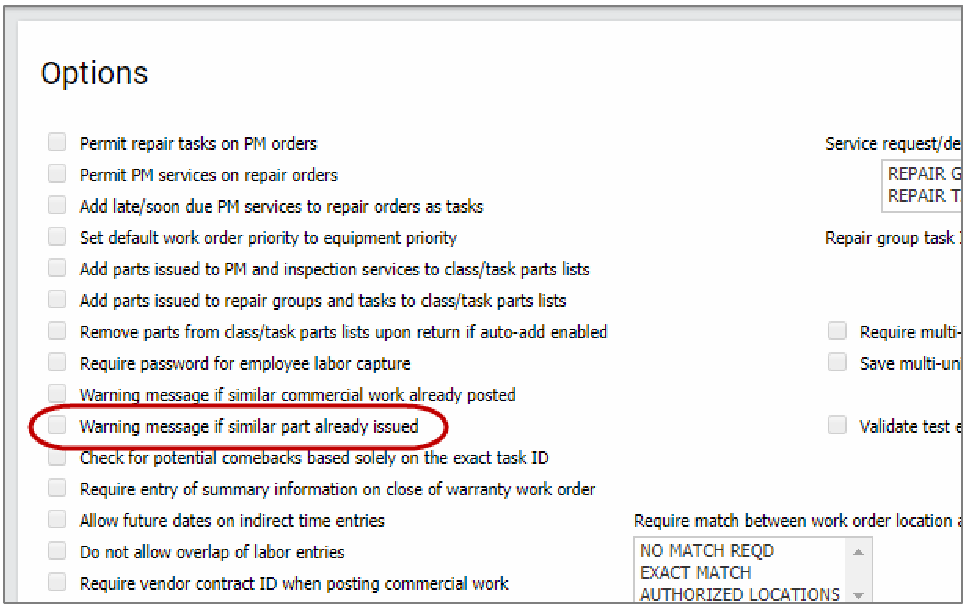
To set up the background options:

1. Open the Shop Activity – Setup – Options screen.

    i. Click **Reload**.

    ii. Click **Edit** to unlock the information.

    iii. On the Options tab, ensure the **Warning message if similar part already issued** option is not checked. If you unchecked this option, save the changes.

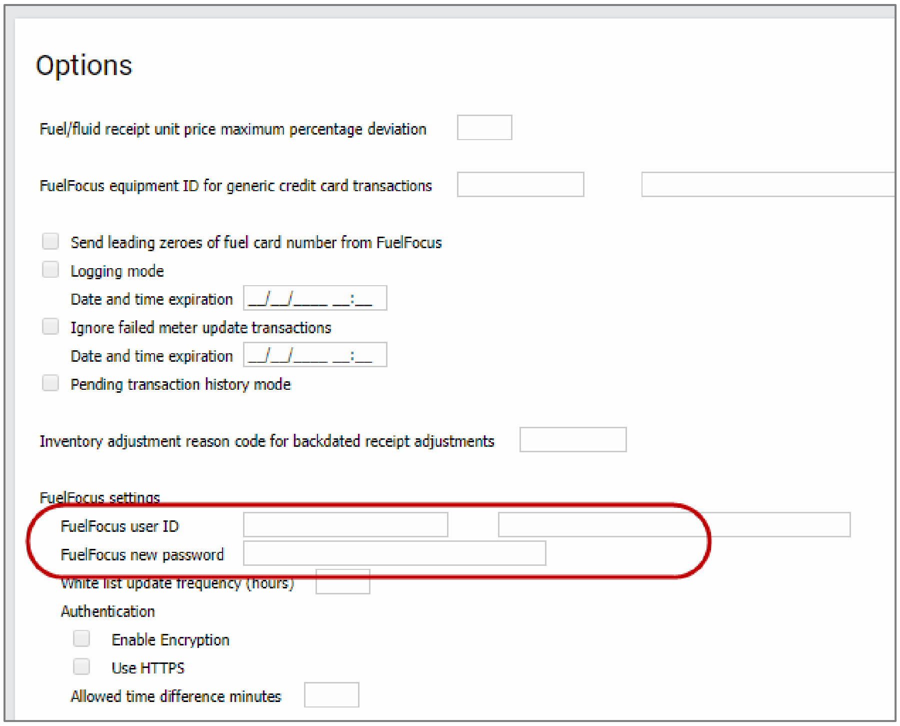


2. Open the Fuel/Fluid Tanks – Setup – Options screen.

    i. Click **Reload**.

    ii. Click **Edit** to unlock the information.

    iii. On the Options tab, enter a valid user ID and password, and click **Save**.

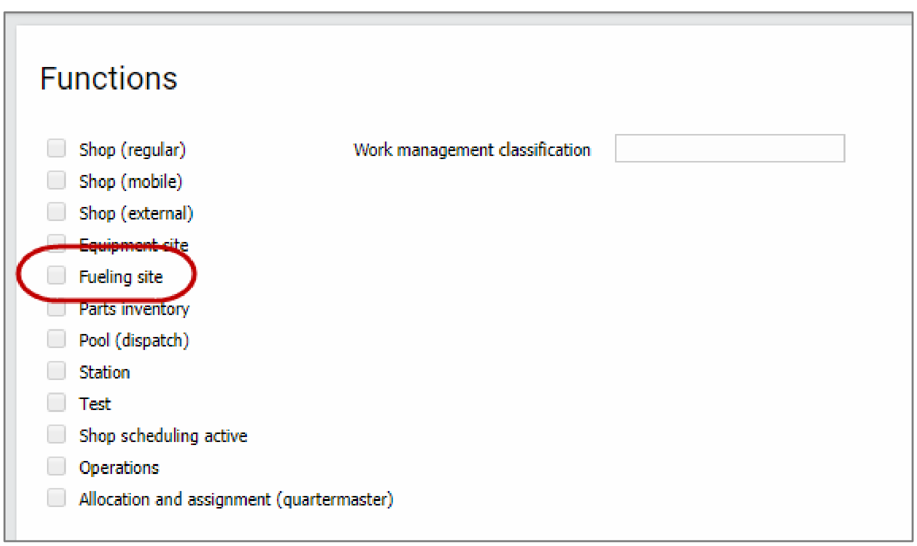


3. Open the Locations – Primary Information screen.

    i. Filter for your Location ID.

    ii. Click **Edit** to unlock the information.

    iii. On the Functions tab, ensure the **Fueling site** option is checked and save.



Fueling Sites

You must verify the fueling site exists. If the needed fueling site does not exist, create a new fueling site.

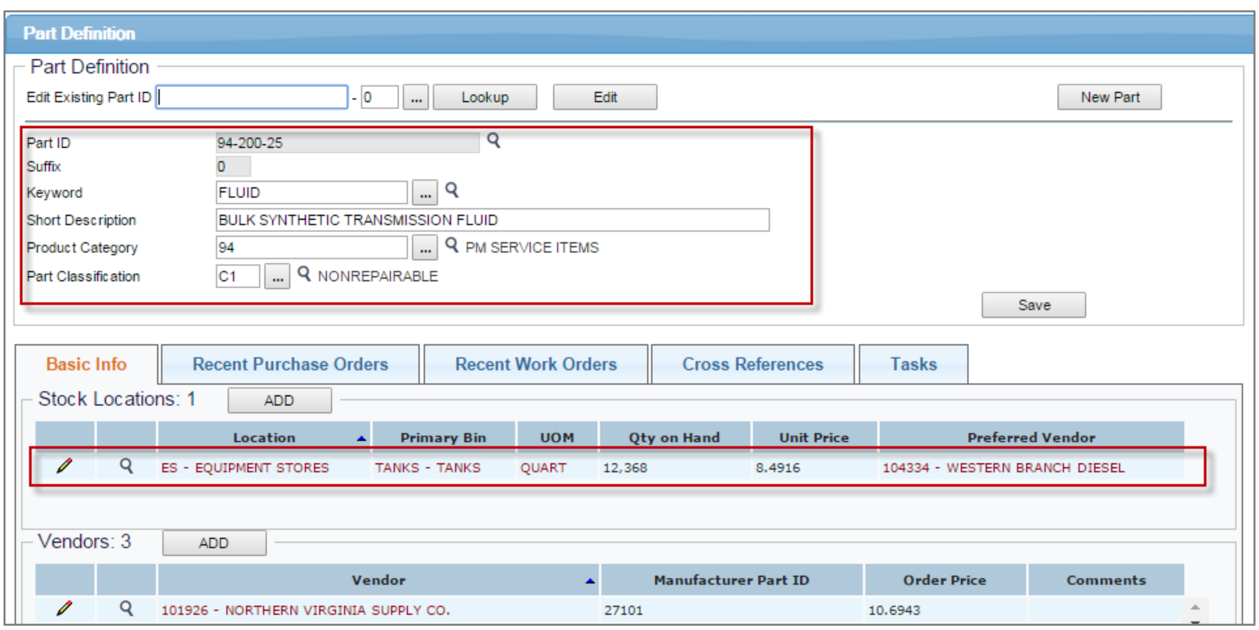
To set up a fueling site:

1. Open the Fueling Sites screen.
2. Click **New**.
3. Type a new **Site ID** and name, and a **Description** of the site and a **Location ID**.
4. Click **Save**.

Set up Parts Data

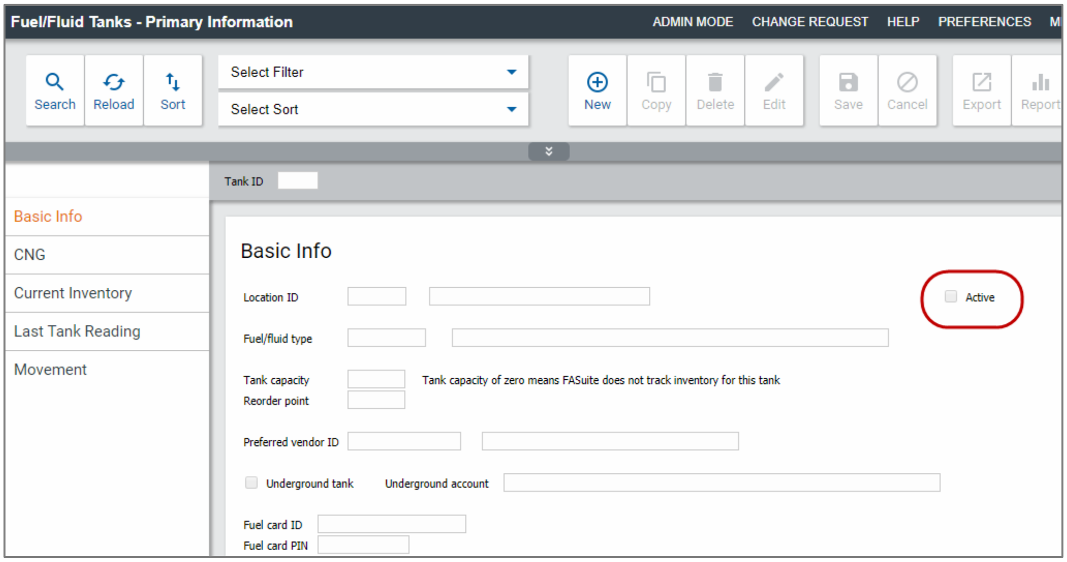
There are many items that need to be set up for parts data for FluidFocus to work properly.

- Create a location on the Parts – Location Information screen that will be used as an inventory location for your fluid. On the Basic Info tab, the Unit of Measure must match the UOM of the fluid type.
- On the Parts – Primary Information screen, create and define each fluid that will be dispensed as a part with a quantity on hand and unit price.
- On the Part Classification screen, Basic Info tab, make sure the parts have the option **Allow Fractional Quantity** checked.
- Set up a fluid/product type on the fluid/product type screen. The part ID must match.



Set up Fuel Tanks

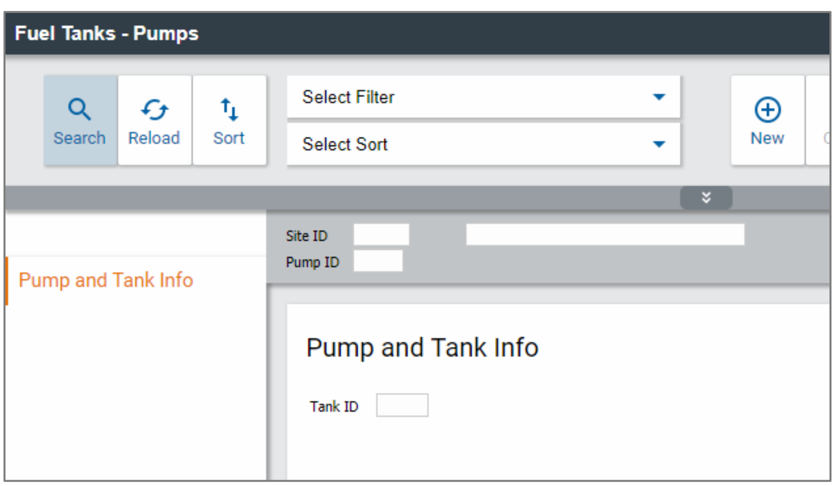
1. On the Fuel/Fluid Tanks – Primary Information screen, set up fuel tanks at locations for each fluid and be sure to check the **Active** checkbox to make the tank available as an active tank. The tank location ID must match the inventory location ID.



Note: The **Fuel/fluid type** field must reference a fluid/product type which must be set up on the Fluid/Product Types screen.

2. Set up each hose as a fuel tank pump on the Fuel/Fluid Tanks – Pumps screen.

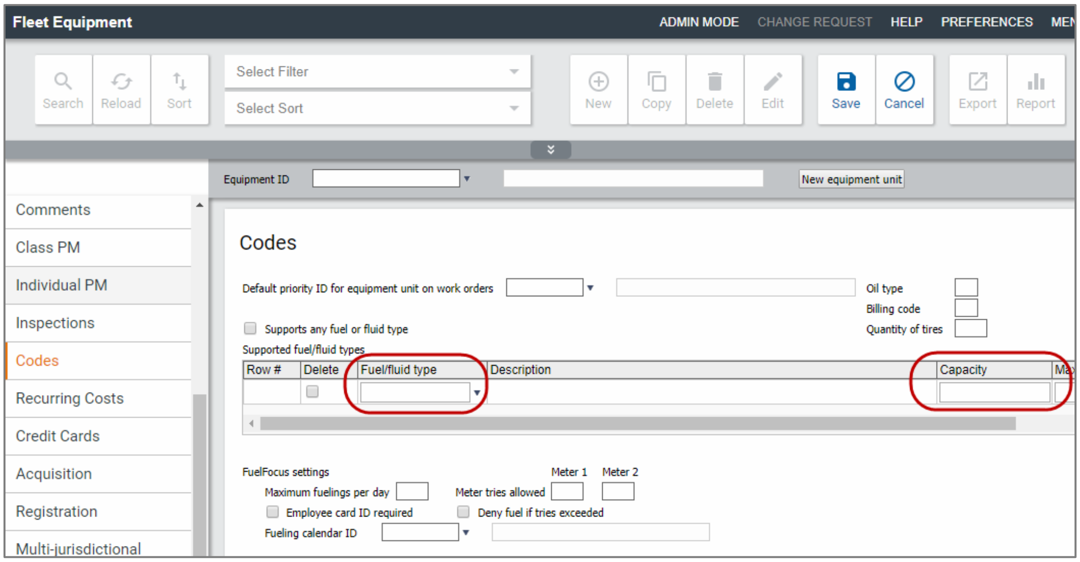
Note: The pumps must be configured to the physical orientation of the shop and will also be configured in the ICU setup.



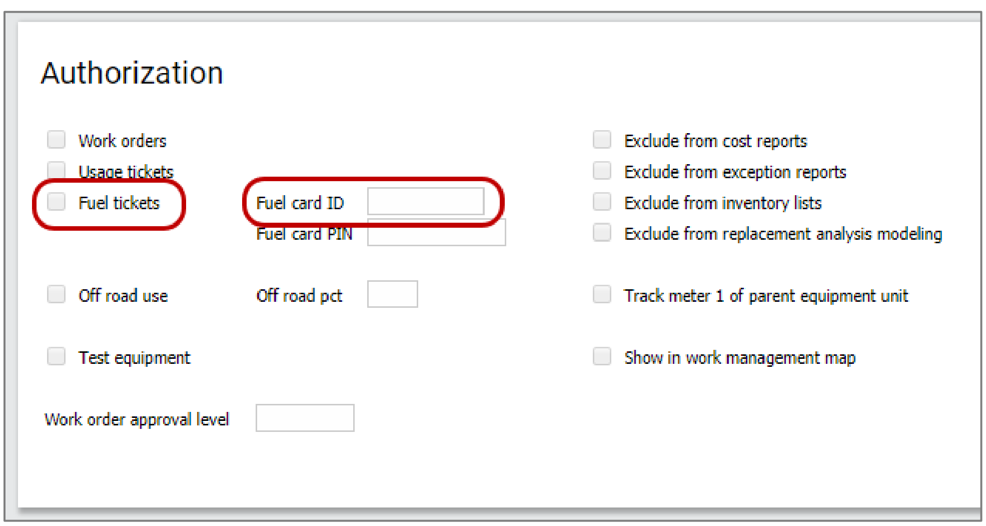
Update Fleet Equipment and Components

To update fleet equipment and components:

1. On the Fleet Equipment screen, Codes tab, enter the **Fluid/fuel type** and **Capacity** on the Equipment Record.

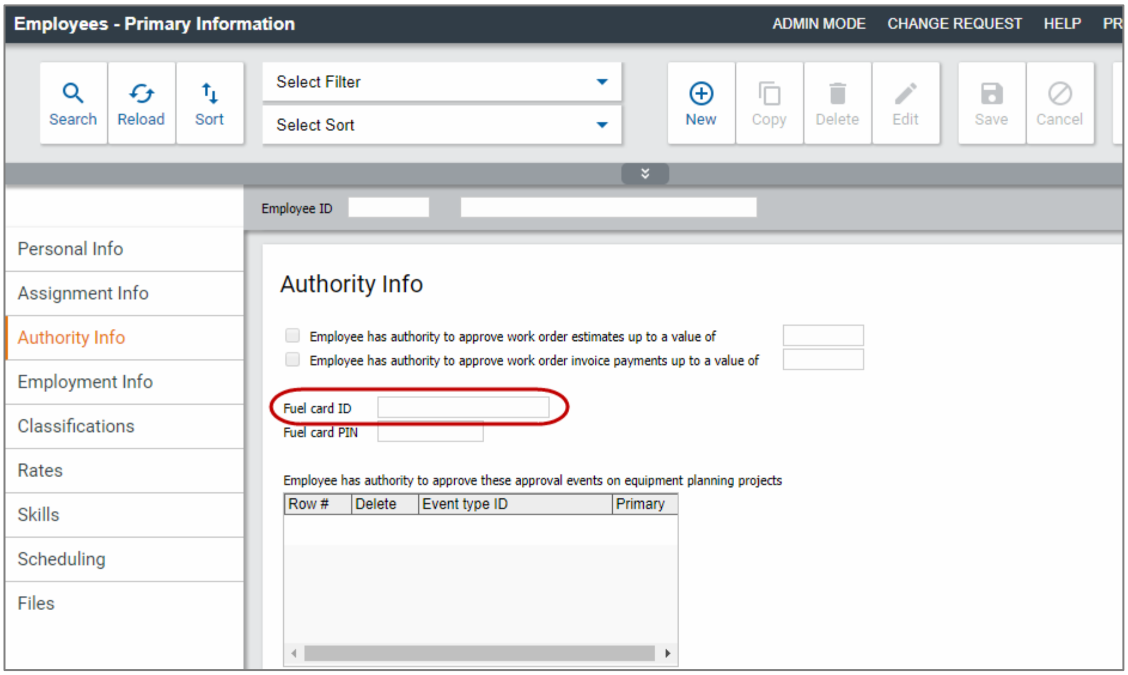


2. On the Authorization tab, check the **Fuel Tickets** checkbox and enter the **Fuel card ID** for each equipment record.



Update the Employee Primary Information

1. Open the Employee – Primary Information screen.
2. Filter for the employee ID.
3. Click **Edit** to unlock the information.
4. On the Authority Info tab, enter the Fuel card ID.

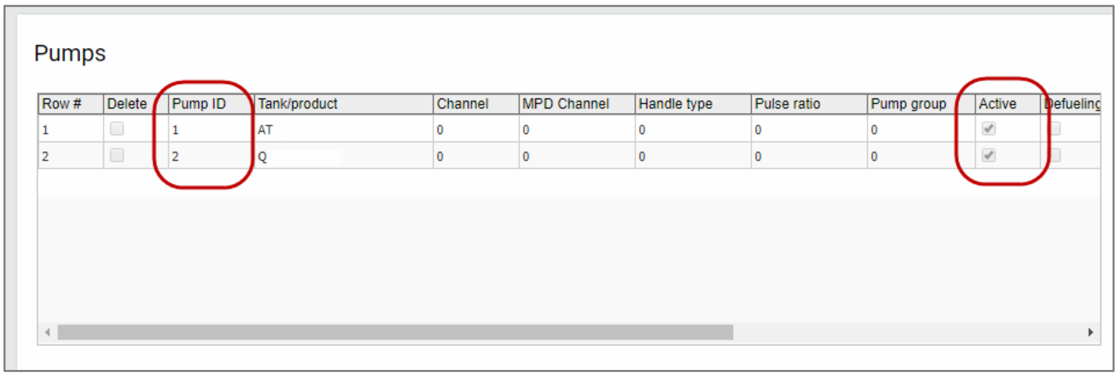


Setup Island Control Unit

The Island Control Unit (ICU) needs to be set up before it can be used by technicians to enter fluids information.

To set up the ICU:

1. Open the Island Control Unit Setup screen and open the record for your site ID.
2. On the Pumps tab, enter each **Pump ID** (LL Hose number) and check the **Active** checkbox for each.



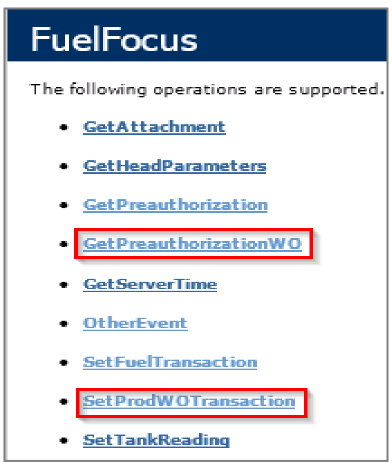
Testing Application Setup and Configuration

Testing takes place in the Interface services page. The location of the client's interface services page will depend on the location created during installation of the web services. You can find this in the IIS Manager.

To open the service:

1. Open your browser and enter the service URL address (the specific host URL will be provided by support. A generic example is provided below).

2. Choose the service needed. There are two services used to test FluidFocus before integrating with LincolnLube; GetPreauthorizationWO and SetProdWOTransaction.



GetPreauthorization

The following table describes the elements of the XML string that are used to test the authorization step of the integration. This process confirms the requested elements from LincolnLube exist in prior to dispensing the product.

<XML Elements	Testing Notes
<ROOT><REQUEST>	--
<TYPE>AUTHORIZATIONWO</TYPE>	Authorization Request Type
<ICU>3</ICU>	ICU Identified in FA
<LOCATION>GMF</LOCATION>	Site ID as Identified throughout FA
<HOSE>18</HOSE>	Hose in LincolnLube = Pump in FA

<XML Elements	Testing Notes
<WO>GMF-2014-1602</WO>	Must be open WO and format must be LOC-YYYY-WO#
<JOB>061-0000</JOB>	Task assigned to WO, User assigned to task
<EMPCARDNO>18501</EMPCARDNO>	EMPCARDNO = FA Employee Fuel Card ID
<UNITCARDNO>702</UNITCARDNO>	UNITCARDNO = FA Equipment Fuel Card ID
<EMP_FAC_CODE/>	NA
<QUANTITYDISPENSED>1</QUANTITYDISPENSED>	Quantity to dispense
</REQUEST></ROOT>	--

Message

After creating a work order for a test unit, adding a task, and assigning a user to the task, enter the elements into the XML string below and copy and paste it into the interface services page and select invoke.


```
<ROOT><REQUEST><TYPE>AUTHORIZATIONWO</TYPE><ICU>3</ICU><LOCATION>GMF</LOCATION><
HOSE>18</HOSE><WO>GMF-2014-1602</WO><JOB>061-
0000</JOB><EMPCARDNO>18501</EMPCARDNO><UNITCARDNO>702</UNITCARDNO><EMP_FAC_CODE/
><QUANTITYDISPENSED>1</QUANTITYDISPENSED></REQUEST></ROOT>
```


Response

An acceptable response will generate a **Granted** authorization. Notice the returned data also contains the allowed products and quantity as defined in the Equipment Record, Codes tab


```
<?xml version="1.0" encoding="UTF-8"?>
<stringxmlns="http://Maximus.org/AssetSolutions">
<ROOT><RESPONSE><TYPE>AUTHORIZATION</TYPE><AUTHORIZATION>GRANTED</AUTHORIZATION>
<PROMPT></PROMPT><UNITPIN>0</UNITPIN><EMPPIN>0</EMPPIN><MAXQUANTITY>100.00</MAXQ
UANTITY><PRODUCTSALLOWED><PRODUCT><CODE>08</CODE><MAXQTY>100.00</MAXQTY></PRODUC
T><PRODUCT><CODE>11</CODE><MAXQTY>100.00</MAXQTY></PRODUCT><PRODUCT><CODE>12</CO
DE><MAXQTY>100.00</MAXQTY></PRODUCT><PRODUCT><CODE>CNG</CODE><MAXQTY>100.00</MAX
QTY></PRODUCT></PRODUCTSALLOWED><MESSAGE></MESSAGE><ACKREQUIRED>N</ACKREQUIRED><
/RESPONSE></ROOT></string>
```


When errors are processed, they usually generate towards the end of the XML and require you to scroll to the right to view them.

SetProdWOTransaction

The following table describes the XML string to be entered into the interface services page. This process confirms the requested elements from LincolnLube are posted to a work order.

<ROOT><RECORD>	**--**
<TYPE>PRODUCTISSUED</TYPE>	Authorization Type
<VALIDATION>ONLINE</VALIDATION>	Validation Type
<SITE>GMF</SITE>	Site as defined in FA – Pumps
<ICU>3</ICU>	ICU as defined in FA– Island Control Units
<LOCATION>GMF</LOCATION>	Site ID as defined throughout FA
<TRANSACTIONSEQNO></TRANSACTIONSEQNO>	Transaction number to be posted to DB
<HOSE>18</HOSE>	Hose in LL = Pump in FA
<PRODUCT>08</PRODUCT>	Fluid/Product Type
<ISSUEDATETIME>03/19/2014 08:57:00</ISSUEDATETIME>	Time and Date of process
<UNITCARDNO>702</UNITCARDNO>	Equipment unit
<UNITPIN></UNITPIN>	As required per Equipment Record - Authorization
<METER1>173662</METER1>	Current Meter 1
<METER2>10948</METER2>	Current Meter 2
<EMPCARDNO>18501</EMPCARDNO>	EMPCARDNO = Assigned Fuel Card in FA
<EMP_FAC_CODE>AMF</EMP_FAC_CODE>	Assigned Facility location of employee/user
<EMPPIN></EMPPIN>	As required per Employee Record – Authorization
<QUANTITYDISPENSED>1.5</QUANTITYDISPENSED>	Qty must exist in Part Loc record of Fluid Type
<MESSAGEISSUED /><MESSAGERESPONSE />	--
</RECORD></ROOT>	--

Message

After creating a successful preauthorization, copy/paste the XML below into the interface services page and select **Invoke**.


```
<ROOT><RECORD><TYPE>PRODUCTISSUED</TYPE><VALIDATION>ONLINE</VALIDATION><SITE>GMF
</SITE><ICU>3</ICU><LOCATION>GMF</LOCATION><TRANSACTIONSEQNO></TRANSACTIONSEQNO>
<HOSE>18</HOSE><PRODUCT>08</PRODUCT><ISSUEDATETIME>03/19/2014
08:57:00</ISSUEDATETIME><UNITCARDNO>702</UNITCARDNO><UNITPIN></UNITPIN><METER1>1
73662</METER1><METER2>10948</METER2><EMPCARDNO>18501</EMPCARDNO><EMP_FAC_CODE>AM
F</EMP_FAC_CODE><EMPPIN></EMPPIN><QUANTITYDISPENSED>1.5</QUANTITYDISPENSED><MESS
AGEISSUED /><MESSAGERESPONSE /></RECORD></ROOT>
```


Response

An acceptable response will generate a **ProductIssuedReceived** authorization.


```
<?xml version="1.0" encoding="UTF-8"?>
<stringxmlns="http://Maximus.org/AssetSolutions">
<ROOT><RESPONSE><TYPE>PRODUCTISSUEDRECEIVED</TYPE><ICU>3</ICU><TRANSACTIONSEQNO>
</TRANSACTIONSEQNO></RESPONSE></ROOT></string>
```


When errors are processed, they usually generate towards the end of the XML and require you to scroll to the right to view them. See the troubleshooting errors in the appendices to find more information.

3. LincolnLube Configuration

A Lincoln Fluid Control interface installation and configuration guide will be provided by LincolnLube. This document will outline the setup of sites and site settings (tanks and hoses), along with defining dispense and billing information for integration with the FluidFocus system.

For more information or help for LincolnLube documentation, please refer to the Lincoln Industrial Technical Service page.

Appendix A. Sample LincolnLube Errors

Below is an example list of table of errors from the ICU.

Error codes

Code	Text	Explanation
100	Location required	Location code is required
101	Hose is required	Hose number is required
101	WO is required	Work order number is required
101	JOB is required	Job code is required
101	Employee card number is required	Employee card number is required
101	Work order not found	Work order number not found or not in valid status
122	Job not on work order	Job code not found on work order
105	Hose not found	Hose number not found
106	Invalid hose for loc	Hose number not valid for the location
107	No tank available	No tank number associated with hose
108	No product available	No product available
110	Invalid unit/WO combination	Work order number/unit number combination is not valid
111	Invalid aquis. date	Unit acquistion date is null
130	Unit is sold	Unit has been sold
115	No product avail for unit	Product is not valid for this unit
116	Invalid product for unit	Product not valid for this unit
124	Error reading client prefix flag	Module flag 5010, client prefix, is not found
123	Error reading fisc cal	Fiscal calendar for this date not found
118	Invalid emp card no	Employee card number is not valid
119	Invalid emp start dt	Employee start date is after this date
129	Employee is inactive	Employee is inactive
120	Card dt < emp start dt	The effective date of the employee card is prior to the employee start date.
131	Invalid employee	Employee termination date < current date
121	Card dt > emp term dt	Card assign date is > employee termination date.