Enabler Web Applications

Reference Manual

Revision 1.62

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Contents

Document History

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Rev	Date	Description
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1.9	21/04/2014	Updated Backup page; Rearranged sections; Corrected typographical errors.
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Rev	Date	Description
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1.5	02/04/2013	Added UTF8 browser encoding requirement. Updated Activation section.
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1.3	22/01/2013	Added Terminals, Approve For Export, Contacts and Grade Prices sections. Formatting changes, error corrections.
1.2	21/12/2012	Reorganized/Updated content based on revised menu.
1.1	18/06/2012	Formatting fixed, error corrections.
1.0	01/06/2012	Document creation.

Notes

- This document is formatted for A4 paper size; changing paper size in electronic versions may cause formatting problems.

1 Introduction

This manual describes the built-in web applications installed with the Enabler.

The first part describes how to log into the system and how to generally interact with the web site. The following sections go into detail about each page available in the system.

Most screenshots included in this manual show the web page content without the menu.

The contents of this manual are accurate at the time of publication and are subject to change without prior notice.

1.1 Compatible Browsers

The Enabler Web applications are tested to be compatible with all major browsers.

Browser		Tested Version
Microsoft Edge		Version 80 and higher
Microsoft Internet Explorer		Version 9 and higher *'Compatibility View' is not supported*
Mozilla Firefox		Version 30 and higher
Google Chrome		Version 29 and higher
Safari		Version 15.1 and higher
Opera		Version 36 and higher

Notes:

- The browser's character encoding must be set to **UTF-8** in order for non-English text to be displayed properly. Refer to your browser's documentation on how to set the encoding.

- **JavaScript** must be enabled in the browser, otherwise some functionality and configuration options will be unavailable.

- It is recommended that you use one of the browsers listed above to access the Enabler Web application. It may be possible to use browsers not listed above, but unexpected behaviour may be encountered as they have not been extensively tested.

- When using SSL for Enabler Web Applications, it is recommended that you use the latest browser version and latest updates for your OS platform. For Chrome on iOS, ensure that you have at least iOS 8.1. For Internet Explorer 9 and 10, you need to enable TLS 1.2 from the Advanced tab of the Internet Options menu.

1.2 Enabler Desktop

1.2.1 Web Server

The Enabler web application is a Windows service (EnbWeb) that runs in the background. Once the Enabler is installed, the web service runs automatically when your Enabler Server Computer is started. You may manage and control the service via the Windows Services control panel.

Alternately, you may control the service from the command line using the 'net' command. The web service name is EnbWeb

To start the service:

To stop the service:

Ensure that no one is using the Enabler web applications before stopping the service.

1.2.2 Accessing Enabler Desktop Web Apps

After installing the Enabler Server, you may access the Enabler Web Application login screen by browsing to the web address – For example:

http://localhost:8081
http://10.1.1.118:8081
http://desktophostname:8081

If SSL is enabled, https:// must be used to instead – For example:

https://localhost
https://10.1.1.118
https://desktophostname

Unless you have changed the Port, the default is 8081, or 443 if SSL is enabled.

When accessing the Web Apps from another computer you must use the IP address or hostname. This is because 'localhost' always points to the device you're using.

When SSL is enabled, a redirect service listens on port 80 so when http:// is accessed it automatically redirects the browser to https://. If the hostname used does not match the SSL certificate, then the browser will show a security warning.

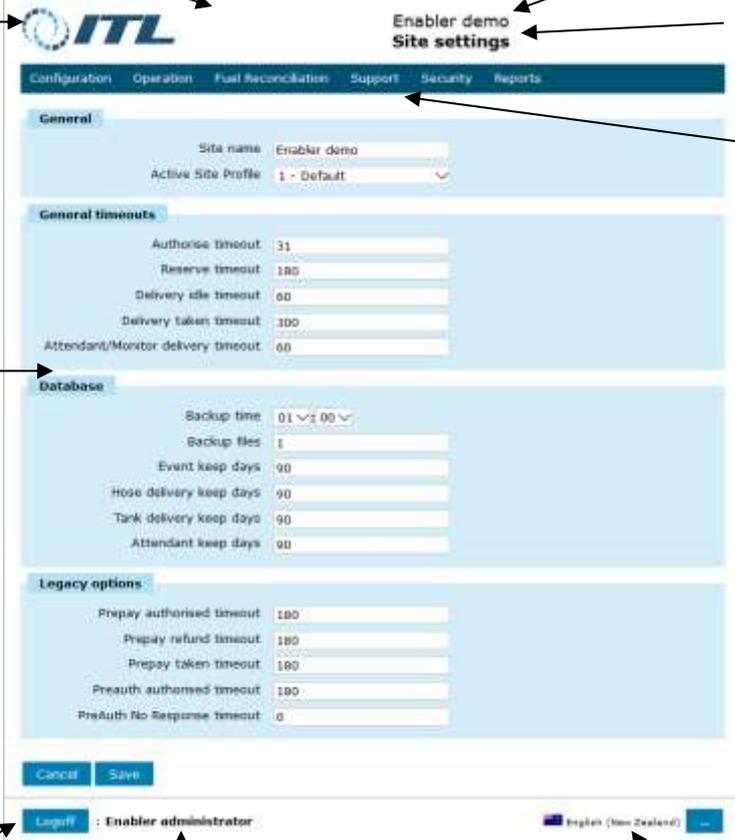You can also connect using the "Enabler Web" shortcut in the Windows Start menu.

Below is the Enabler Desktop login screen:

Welcome to Enabler Desktop

Enter your user name and password
then click **Login**

User name	
Password	

Login   Clear

Here you must enter your user name and password to access the system. User names and passwords are set up using the **User/Role Security page**.

The factory default user configuration is below, use this configuration to login in for the first time and change them afterwards.

User name: admin

Password : admin

The password **must** be changed to make the system secure.

1.2.3 Enabler Card Hardware Types

Enabler Cards supported by Enabler Desktop are:

- **Enabler PCI/Express** (includes **Enabler PCI, Enabler Express and Enabler Express V3**) – cards installed in a Desktop PC's local computer bus. Enabler Windows device drivers are required to be installed in the Enabler Server before they can be used by the Enabler Services and Applications. *Only one PCI/Express Card can be used at a time.*

- **Enabler Ethernet** – a network connected Enabler card. Enabler Ethernet connects to the Enabler Server via an Ethernet network interface. No Windows device driver is required. The Enabler Server must have network access to the Enabler Ethernet cards before they can be used by the Enabler Services and Applications. *Multiple Enabler Ethernet Cards can be set up.*

See the **Cards section** for more details.

1.3 Enabler Embedded

1.3.1 Accessing Enabler Embedded Web Apps

The Web Server in Enabler Embedded runs automatically when the system is powered on. To access the Web Applications, browse to the IP address shown on the LCD display – For example:

http://10.1.1.140

If SSL is enabled, https:// must be used – For example:

https://10.1.1.140
https://embhostname

Access to the Enabler Embedded Web Apps is always with the default HTTP port 80, or the default HTTPS port 443 if SSL is enabled.

When SSL is enabled, a redirect service listens on port 80 so when http:// is accessed it automatically redirects the browser to https://. If the hostname used does not match the SSL certificate, then the browser will show a security warning.

1.4 User Access

Enabler Users can be set up in the system with different access permissions. Windows User Authentication is supported.

See the **Security section** for more information.

Depending on the user access settings, the user will see a set of menus displayed according to the user's settings. The first page displayed is the system status screen.

1.5 Web page layout

The following page shows the layout of the web site with admin user site settings.
The admin has all access permission enabled so a full menu is shown.

Title Bar   Site Name

ITL Logo   Page Name

                                                             Menu
                                                              Headings

Page
Content

Logoff   Current   Currently selected
Button   User   Language & Flag

1.6 Web page navigation

Users can navigate through various areas of the Enabler web by hovering over the menu items with the mouse to access the sub menus.

On tablet devices you need to tap the menus to display the sub menu items.

1.7 Entering of data and correcting errors

All data is entered into a form and then the Enter key or **Save** button is pressed to confirm the entry.

The data is then validated and if any validation errors are found, the invalid field will be highlighted in red with an explanatory message beside the field.

Shown here are examples of pages with errors. The first has no data in the Loss field and the second example has the wrong data.

The fields need to be corrected and the page confirmed again.

1.8 Language Settings

By default, Enabler will switch languages based on your browser's language configuration.

To change the language settings for the Enabler, click the language button at the bottom right side of the screen.

Language button

This will open the following screen:

Browser Default: The language set by the browser

System Default: The default language of the Operating System.

English: English language.

Clicking the **Apply** button will set the language change.

1.9 Activation

If you have Enabler Desktop V4.5.0 (or newer) with an Enabler Express, Enabler Ethernet Card or have Embedded V1.2.0 (or newer), then you may skip and ignore the **5.2 Activation** section.

If you're running on older Enabler releases **and/or** have an Enabler PCI card, then the Enabler Server must be **activated** by ITL's software license server after installation.

Refer to the **Activation section** for more details.

2 Configuration

The Configuration submenu provides site wide configuration and allows the user to setup forecourt grades and forecourt devices for their site.

2.1 Site Settings

The Site settings screen is used to configure a range of site-wide (system) parameters.

General:

Site name: A customizable name for the site.

Active Site Profile: This shows the site wide profile that is currently in use. Site Profiles can be managed from the **Site Modes** Configuration page.

General Timeouts:

Authorise timeout: The number of seconds that the pump stays authorised before reverting to idle/locked mode (the nozzle must be lifted within that time). This setting does not apply when auto authorise is enabled.

Maximum 9999 seconds.

Reserve timeout: The number of seconds that a pump reserve remains in place. After this timeout the reserve will be cancelled.

Maximum 9999 seconds.

Delivery idle timeout: The number of seconds after fuel flow has stopped and before the nozzle has been replaced, before a warning will be raised

Maximum 9999 seconds.

Set to zero (0) to disable this warning.

Delivery taken timeout: The number of seconds from the end of a delivery until the delivery is displayed in red on the Pump icon (indicating that this is a possible drive off).

Maximum 9999 seconds.

Attendant/Monitor delivery timeout: The number of seconds that a completed delivery is available (on the pump icon) before the Enabler clears and logs it as a 'monitored' delivery. This setting only applies if the current pump or site mode allows Monitors or Attendants.

Maximum 9999 seconds.

Database:

Backup time: Sets the time for the backup to be run.

Backup files: Maximum number of backup files to keep. The set of backup files is automatically archived and maintained.

Maximum: 31 files for Enabler Desktop. 7 files For Enabler Embedded.

Event keep days: The number of days that exception events remain in the system.

Maximum: 1000 days for Enabler Desktop. 31 for Enabler Embedded.

Hose delivery keep days: The number of days that completed hose delivery details remains in the system.

Maximum: 1000 days for Enabler Desktop. 31 for Enabler Embedded.

Tank delivery keep days: The number of days that completed tank drops (tanker deliveries) remains in the system.

Maximum 1000 days for Enabler Desktop. 31 for Enabler Embedded.

Attendant keep days: The number of days that closed attendant periods remains in the system.

Maximum 1000 days for Enabler Desktop. 31 for Enabler Embedded.

Legacy Options:

These apply to the Enabler ActiveX API only; they do not apply to the V4 API.

Prepay authorised timeout: The number of seconds that the pump will stay authorized for a prepay, before the nozzle is lifted. This determines the available time the customer has to start the prepay delivery, after a prepay is finalized at the POS.

Value range: 1 to 9999 seconds.

Prepay refund timeout: When a prepay is not delivered to the full amount, the remaining amount will be shown on the pump icon as a prepay delivery refund. This timeout determines how long the prepay refund remains on the icon. After this time period expires, the prepay refund will be cleared automatically.

Value range: 0 to 9999 seconds.

Set to zero (0) to disable prepay refund timeout – the refund delivery will remain on the icon until cleared manually by user.

Prepay taken timeout: The number of seconds the pump remains blocked after a prepay delivery refund is created, if the refund is paid out to a customer. Note this timer starts when fuelling is completed, not from the time the refund is paid to the customer, since the pump is also blocked while the refund is showing on the pump icon.

If the refund is allowed to timeout according to the "Prepay refund timeout", then this timeout does not apply.

Value range: 0 to 9999 seconds.

Set to zero (0) to disable prepay taken timeout.

Preauth authorised timeout: The number of seconds that the pump will stay authorized for a prepay before the nozzle is lifted. This determines the available time the customer has to start the prepay delivery, after a prepay is finalized at the POS.

Value range: 0 to 9999 seconds.

Set to zero (0) to disable preauth authorised timeout.

PreAuth No Response Timeout: When a pump is delivering and goes to not responding state, if the pump is still not responding after this timeout expires a delivery will automatically be created from the most recent running total.

Value range: 0 to 9999 seconds.

Set to zero (0) to disable preauth no response timeout.

The **Save** button will commit the changes, use **Cancel** to undo all pending changes.

2.2 Features & Options

This page allows you to choose Enabler features to activate including Fuel Reconciliation. These options are provided for System Integrators and are usually set according to local automation needs. We recommend you configure these features as part of your installation process.

General:

> **Auto site mode activation:** Tick this to select automatic switching between Mode Profiles based on the start/end and valid day's settings.

Note: **Auto site mode activation** gets disabled/un-ticked automatically if a **Site Mode Profile** is activated manually.

> **Min Etotal difference:** Site-wide threshold for discrepancies in electronic totals.

> **Hose Turnover Support:** Tick this to use the Hose Turnover fields.

Blocking:

> **Can disable hose during delivery:** This extends disabling of hoses to stopping deliveries already in progress.

Note: Following options apply to gauged tanks only.

> **Disable Tank On Low Level Alarm:** Tick this to allow the tank to be automatically blocked when a low level alarm is received from the tank gauge. The tank will be unblocked when the alarm stops. If **Disable Tanks On Tanker Delivery** is ticked then there must be no tanker deliveries in progress in order to unblock the tank. This setting applies to gauged tanks only.

> **Disable Tank On Tanker Delivery:** Tick this to allow the tank to be automatically blocked when a tanker delivery is detected from the tank gauge. The tank will be unblocked when the tank gauge detects that the tanker delivery has stopped. If **Disable Tank On Low Level Alarm** is ticked, then the low level alarm must not be active in order to unblock the tank. This setting applies to gauged tanks only.

Fuel Reconciliation:

Tank Dips: Tick this to enable tank dip entry in the Fuel Reconciliation page.

Tank Movements: Tick this to enable entry of tank movements in the Fuel Reconciliation page

Pump Meters: Tick this to enable entry of tank meters in the Fuel Reconciliation page.

Approval Required: Tick this so that wet stock approval procedures be done during fuel reconciliation.

Map test delivery to tank transfer: Tick this to allow Test Deliveries to be mapped to Tank Transfers within Fuel Reconciliation.

Prices:

Profile Based Price Levels: Tick this to enable Site Mode Profile based Price Levels. By default (Unticked), price levels are based on Pump settings. This option is **only available if the system has more than one Price Level configured** into the Enabler System.

Auto postmix grade prices: Tick this if you want Enabler to automatically compute prices for postmix grades. You can also set the precision for decimals in blending prices with rounding or truncating behavior as default.

If the Auto postmix grade prices checkbox is not ticked **Blending decimals** and **Blending rounding fields** are not displayed.

Attendant:

Supports attendants: Tick this to enable Attendant functionality. When enabled, attendants can be configured into the system; and they can also authorise pumps (via tags or logon procedure). The resulting deliveries will be linked to the authorising attendant.

Tagging Support: Tick this to enable Tagging functionality. When enabled, pumps that support integrated tag readers will have the option available on the pumps tab to indicate that they do have a tag reader installed.

This will allow the pump server to retrieve tag data from the pump and trigger tag read events.

Clear deliveries: This option determines whether Enabler Pump Server clears Attendant deliveries after the configured timeout. System integrators may choose to turn this option off and clear attendant deliveries in their application (for example after creating a retail transaction or audit-trail entry for the delivery).

On = Enabler Pump Server clears each Attendant Delivery after timeout

Off = Your application is responsible to clear Attendant deliveries.

Legacy Options:

The following options only apply to applications using the APIs for Legacy Prepay and Preauth:

Prepay refund calculation type: When a prepay is not delivered to the full amount, a 'prepay refund delivery' is created. This 'delivery' is a representation of the difference between the authorised amount (money) and what was actually delivered.

However, like any other delivery, the refund 'delivery' has also volume and price fields. This setting controls what values the volume and prices are given:

Calculate volume and price if possible
With this setting:
a) If some fuel is delivered the Prepay refund will include an approximate volume of fuel not delivered, and the unit price for the grade selected.

b) If no fuel is delivered and only one hose was authorised, the Prepay refund will indicate the amount of the prepay (money), the approximate volume of fuel, and the grade unit price.

c) If no fuel is delivered and more than one hose was allowed, the Prepay refund will indicate the amount of the prepay (money), and the unit price and volume will be set to zero (0).

Abstracted refund with 1 unit of volume
This reverts to the older previous Enabler behaviour.
When a prepay delivery refund is created, the volume is set to 1.0, and the price is set to the undelivered value.

The **Save** button will commit the changes, use **Cancel** to undo all pending changes.

2.3 Site Modes

When selecting the Sites modes from the menu the site profiles list will be displayed.

Site modes determine how the overall forecourt operates at a particular time of the day or week. These are used to change settings for all pumps on the forecourt at one time. For each profile there are a number of parameters, which can be switched "on" or "off".

It allows for some sites that operate 24x7 to switch between different site modes for daytime or night time operation, or at weekends.

Each Site Mode profile contains a default profile and an optional list of profiles that apply to specific pumps.

The **Activate** action will force the selected profile to be activated.

The **Edit** action will take you to the **Site Mode Details** **page** for that profile.

The **Delete** action will delete the selected site mode profile.

Note:

1. You cannot delete a profile if it is the default profile or is the currently active profile.

2. The **Activate** action also disables/un-ticks the **Auto site mode activation**.

The **Add** button will create a new site mode profile and take you to the Site Mode configuration page.

2.3.1 Adding/Editing Site Modes

The **Site Mode Details page** provides the form for entering and editing Site Mode information.

Site Mode Details:

Name: A free-form name for the Site Mode

Number: A logical number for the Site Mode Profile.

Start: An automatic start time to start this Site Mode. ***Note:*** This will not work if **Auto site mode activation** in the Features & Options is disabled.

Valid Days: The days when the Site Mode is active. If the day is disabled, then the Site Mode will revert to a default profile for that day. This field is only available on non-Default Profiles.

Options:

Auto Auth: Enables the pump to be automatically authorised to deliver when the hose is lifted. Since Auto Auth applies only to Postpays, the Postpays option will be activated if Auto Auth is turned on. The pump will always auto authorise if monitor deliveries are permitted.

Stacking: The most recent fuel delivery may be put onto a 'stack' when enabled allowing another fuel delivery to begin before the first one is paid.

Max stacked deliveries: The maximum number of stacked deliveries allowed per pump.

Auto Stacking: Allows the system to automatically stack the current sale if the pump nozzle is lifted to begin another delivery before the first has been paid. This field is turned off if Stacking is turned off

Authorise Mode: There are four options available on how the delivery is authorised/cleared:

Monitors: Turns on monitor mode for the forecourt which allows:

- Pumps to be automatically authorized when the hose is lifted.

- Deliveries to be automatically cleared by the system after a (configurable) timeout, or when the pump calls again.

Attendant: Allows the logon and logoff of attendants to a particular pump.

Auto Clearing of Attendant deliveries is optional.

Attendant Tag: Allows an attendant to present a tag on a Tag Reader to authorize a pump for delivery.

External Tag: Allows a customer to present a tag on a Tag Reader to authorize a pump for delivery.

Fallback: Enables the manual switching of the system into fallback mode.

Lights: Turns pump lights on – where supported by the specific pump protocols in use.

Price Level 1 / Price Level 2: The price levels for this site mode can be specified if **Price Profile Based Price levels** in Features & Options is ticked.

Legacy Options:

These only apply to applications using the Enabler ActiveX API.

Postpay: Determines whether Enabler will allow authorisation of pumps without using a Prepay or Preauth authorisation. The customer can pay after the delivery is completed.

Prepay: Determines whether Enabler allows client applications to use Prepay functionality. The customer can pay for a delivery before the hose is lifted.

Preauth: Determines whether The Enabler allows client applications to use Preauth functionality. This feature is most commonly used by outdoor payment terminals.

2.3.2 Pump Specific Profiles

This shows a list of the pump specific profiles and options for the selected profile.

The **Edit** action will allow the selected profile to be changed.

The **Delete** action will remove the selected pump profile.

The **Add Pump Profile** button will create a new pump profile and display the following page.

Number: This is a drop-down list of the pumps configured in the system

Options: See **Site Mode Details**

> *Notes:* Using *Use site mode setting* option on Stacking filed will disable the *Max stacked deliveries* filed in order to follow the Max stacked deliveries setting on site mode.

The **Set to defaults** button will reset all the options to the same values as in the associated Site Mode profile.

Notes: Changing the Site Mode profile will affect the new site profile settings as well as any pump specific profiles, thus allowing in one step to switch between two fully separate and customized forecourt modes.

In order to have a pump with a fixed mode of operation, please create a pump profile for it within each site profile.

2.4 Grades

The Grades page displays a list of the current configured grades.

The **Add Grade** button will create a new grade and take you to the **Grade Details page** to enter the details.

The **Edit** button will open the configuration page for editing a selected grade.

The **Delete** button will remove the selected grade.

Note: A grade that is currently selected for any tank configuration cannot be deleted. The grade to be deleted needs to be changed to another grade in the tank's grade selection prior to deletion. This also applies for grades configured in pump hoses.

2.4.1 Adding/Editing a Grade

The Grade Details page provides the form for entering and editing Grade information.

Grade Information:

> **Name:** A reference name for the Grade.

> **Number:** A reference number for the Grade (any non-zero positive integer).

> **Code:** Oil Company's internal code or other code for the Grade.

> **Delivery timeout:** The number of seconds this grade can deliver before the pump icon shows a warning sign. When the timeout has expired, the pump is

not stopped, but Enabler provides a reminder to the operator that the nozzle has been out (delivering) for too long.

Maximum 1800 seconds (30 Minutes).

To disable this function, set to 0.

Limit Type: The three options that define the limits on deliveries of the specified grade.

- No Limit
- By Value
- By Volume.

Allocation Limit: This field appears after selecting either 'By Value' or 'By Volume' in the Limit Type drop down. This value will be interpreted as money or value depending on the Limit Type setting.

Price Sign Segment: This defines which segment of the price sign is used to display grade prices.

Unit of Measure: This defines the Unit Type used by the grade.

Price:

Minimum Price: The minimum price option for the Grade.

Set to 0 for no lower limit to unit prices.

Maximum Price: The maximum price option for the Grade.

Set to 0 for no upper limit to unit prices.

Tolerance:

The tolerance values here are used to determine whether a tank is inside or outside the tolerance when using the Daily Tank Reconciliation report format for Fuel Reconciliation Application. The values entered must be percentages between 0% and 5%. The tolerance on the report is used as a percentage of the total sales volume. For Example: if a site sells 1000 litres at 1% tolerance, the report will accept variances up-to 10L. Variances over 10L will be marked as "out of tolerance" by Fuel Reconciliation.

2.4.2 Blending

Blending has three options:

Base – No Blending: This option is for grades that do not use blending.

Fixed blending: Used to configure grades that require fixed ratios.

Variable blending: Used to configure grades that require variable ratios.

Grade1: The first grade for the blend. This is normally the fuel-based grade.

Grade2: The second grade for the blend. This is normally the lubricant based grade.

Ratio: Set the ratio of the second grade (**Grade 2**) in the delivery for fixed blending.

Set Number Ratios: Set the number of Ratios for variable blending.

Configuring the number of ratios:

To set the correct number of ratios, enter the number of ratios required in the field next to the **Set Number Ratios** button, click on the button and the ratios will be increased or decreased accordingly.

Note: Changes to this page will only be saved after pressing the **Save** button. To discard the changes and start again, press the **Cancel** button.

2.5 Cards

The Cards page displays the list of **Configured** and **Unconfigured** Enabler Cards for the system.

The **Configured Cards** section lists the Enabler cards **already** set up in the system. The Card Name column indicates the hardware type (see **Enabler Cards Type** section) and number; the Service Number column shows the hardware ID for the card; and the Address can either be **Local**, **Offline** (if not available) or the **IP address** of the Ethernet Card.

The first card listed is considered as the **Primary** Enabler card. If the system requires activation, then Enabler uses the Primary Card's Service Number for Activation. If using a PCI/Express card and an Enabler Ethernet card in conjunction, then the PCI/Express card will be set as primary.

To perform any operation, select first one of the rows listed in the **Configured Cards** or **Unconfigured Cards** and click the desired button. Only the available buttons will be enabled.

The **Edit** button will take you to the **Cards Details page**.

The **Replace** button will take you to the **Replace Card Details page**.

The **Delete** button will remove the selected card from the system. The **Primary Card** cannot be deleted. If the secondary card has ports and pumps configured, then it also cannot be deleted.

The **Locate** button provides a way to visibly identify the Enabler Ethernet on the network (LEDs on the board will blink). See the Enabler Ethernet hardware FAQs on the ITL website for more details.

The **Unconfigured Cards** section lists the Enabler cards that are **NOT** set up in the system but can *possibly* be added. The Type, Service Number and Address column are same as the Configured Cards section. The Connected column shows the IP address of the current Enabler system the card is connected to. If none is displayed, then the Card can be used in this system.

The **Add** button will take you to the **Cards Details page**. Only Enabler Ethernets can be added as secondary cards.

The **Find** button will search for all other Enabler Cards available in the network. Use this in case the card you are after is not yet listed in the **Unconfigured Cards** section.

Note: Changes to these pages will only be done after pressing the **Save** button. To discard the changes and start again, press the **Cancel** button.

2.5.1 Card Details Page

The Card Details page provides the form for adding an Enabler Card and entering its name.

Card Information:

> **Card name:** Indicates the card hardware type and logical card number.

> **Service Number:** The hardware ID for the card.

> **Name / location:** Optional text to describe the card or its location.

2.5.2 Replace Card Details Page

The Replace Card Details page provides the form for replacing a Configured card with an Unconfigured one.

Only **Unconfigured Cards** that are not connected to any Enabler system are listed and can be used as replacement.

The **Select Card** button will display a prompt asking whether to complete the card replacement. The ports and pumps configured from the original card will be restored in the replacement card.

The **Locate** button functions the same as the Locate button in the main Cards page.

Note: Replacing the **Primary Card** may invalidate your Activation. If the **Primary** Enabler card has more used ports than the replacement card, then this is expected to fail.

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2.6 Ports

The Ports page is used to configure the communications ports used by The Enabler.

2.6.1 Enabler Desktop

Below is a screenshot of the Ports page with an Enabler PCI/Express Card as the Primary card and an Enabler Ethernet as a secondary card.

Enabler Card – Port Configuration

To save port changes made, press the **Save Changes** button. This will also restart the server.

Press the **Cancel Changes** button to revert to the original port settings

To restart the server manually, press the **Restart Server** button.

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2.6.1.1.1 Enabler PCI/Express

The Enabler PCI/Express card provides five communication ports which can be configured here.

Port 1 – Port 4

Each of these ports can be configured to use a non-LON (IFSF) protocol. The available protocols are shown in the drop-down combo box.

IFSF Lon (Port 5)

The fifth port is a dedicated IFSF/LON interface. It cannot be configured for any other protocol except IFSF/LON.

2.6.1.1.2 Enabler Ethernet

Enabler Ethernet Card Port configurations are similar to Enabler Embedded. They are normally shown with the heading

Enabler Ethernet (Index)

Each Enabler Ethernet allows three port protocols to be configured. Each port protocol will require a PDM (Product Distribution Module) slot to be used. **Index** refers to the number of the Enabler Ethernet Card into the system.

2.6.2 Enabler Embedded

The Enabler Embedded port configuration allows protocols to be selected for each available PDM (Product Distribution Module) slot.

The screen above shows Enabler Embedded configured to use all 3 onboard PDM/MODULE slots with a different protocol for each.

To save port changes made, press the **Save Changes** button. This will also restart the server.

Press the **Cancel Changes** button to revert to the original port settings

To restart the server manually, press the **Restart Server** button.

To reboot the Enabler Embedded machine, press the **Restart Embedded** button. You will be prompted for confirmation before a reboot takes place. A reboot cannot take place if pumps are in use.

2.6.3 Extended Ports

The **Add Extended Port** button allows The Enabler to be configured to use Serial/COM ports to connect to other equipment including Tank Gauges.

2.7 Pumps

The Pumps page is used to configure the connected pumps.

To add a pump, use the **Add Pump** button. This will take you to the **Pump Details** page.

To edit a pump's configuration, click the **Edit** button.

To remove a pump, use the **Delete** button.

The **Add Mechanical Pump** button is used to setup a pump in Enabler's database that does not support electronic /protocol interface. This allows the manual entry of deliveries done with a mechanical dispenser. Refer to the Add a Mechanical Pump section for more information.

The **Clone Pump** button replicates an existing pump configuration. This can speed-up configuration of pumps of the same type.

2.7.1 Adding/Editing a Pump

The Pump Details page allows entering and editing of pump information.

Details:

> **Number:** The number of the pump. This is the logical number of the pump, and may differ from the actual pump address programmed into the pump electronics (i.e. the Polling address or Physical number).

Name: User defined name for the pump.

Price Level 1 / Price Level 2: The price levels can be specified if the "Price Profile Based Price levels" in Features & Options is unticked.

Connection Settings:

Port: Assigns this pump to one of the configured ports. Only pump types compatible with that port are displayed in this field.

Type: This sets the specific type of pump. This is very important as this determines the behaviour and specific parameter pump communications that are "tuned" for this specific pump type. The drop-down list shows all pump types supported by the Enabler after installation.

Polling Address: This is the address value programmed into the pump electronics to identify it. This may differ from the logical number used on the system (i.e. Pump Number 1 on the system could have a Polling Address at the pump of 3). Pumps cannot have the same address and be on the same port at the same time.

Advanced Settings: For pump types requiring additional configuration options of the Pump Driver, advanced settings are available for a particular pump type as they are described in the relevant FAQ pump pages on the ITL website.

Display format: To select the appropriate display format for the pump. This applies the selected display formats to the delivery and price values received from the pump to match what is shown on the physical pump displays.

Add Hose: Adds a hose to the pump. By default, the hose is set to the next available grade.

Delete Hose: Removes the last hose in the hose list from the pump.

Pump Hoses

The pump hoses section allows configuration of hoses on a logical pump.

Hoses		
Number	**Grade**	**Tank 1**
1	Regular	1 - Regular tank
2	Premium	2 - Pulp tank
3	Diesel	3 - Diesel tank
4	CNG	4 - CNG tank
5	LPG	5 - LPG tank
	Set Number of Hoses to	5

Tank: This is a link to the specific tank that the hose draws its fuel from.

To add additional hoses to the pump, enter the number of hoses and click the **Set Number of Hoses to:** button.

2.7.2 Add a Mechanical Pump

To add a Mechanical Pump, use the **Add Mechanical Pump** button.

This page operates similarly to the **Pump Details** page, except that the default pump type is the Mechanical Pump.

2.8 Tanks

The Tanks screen provides access to setup and current data for each tank installed on the system.

The **Add Tank** button will create a new tank and take you to the **Tank Details page** to enter the details.

The **Edit** button will open the configuration page for that individual tank.

The **Delete** button will remove the tank.

2.8.1 Adding/Editing a Tank

The Tank Details Page allows entering and editing of Tank Information.

Tank Information:

Tank Name: User defined name for the tank.

Grade: A drop down list of the available grades to link to this tank (grades are as defined in the Grade page). This cannot be changed while a tank is connected to another tank.

Number: The logical number assigned to this tank. The logical number can be any number up to a maximum of 99,999,999 (99 Million).

Description: A free form description of the tank (optional).

Physical Label: The actual physical label attached or stuck onto the tank.

Capacity: The capacity of the tank.

Diameter: The diameter of the tank (measured in meters).

Tank type: Provides a drop-down list of the tank types, for example Manual dip or Gauged. Selecting Tank type as Gauged will show the Tank gauge settings configuration in order for Enabler to communicate with the tank gauge.

Gauge Name: A list of available tank gauges setup.

Probe number: The number of the probe for this tank connected to the gauge.

Tank Manifolds:

Connection type: A drop down list of connection types:

> **Manifolded - Line Syphon** - pump draws from both Tanks simultaneously.

> **Manifolded - Tank Syphon** - pump draw from one Tank and the syphon equalises the Tank levels (by gravity).

Connected Tank: A drop down list of other tanks that have the same grade as the current Tank.

Alarms:

> **High volume alarm:** The maximum volume in the tank that will trigger an alarm indicating a tank overfilling condition.

> **High volume warning:** The maximum volume in the tank that will trigger a warning indicating a tank overfilling condition.

> **Low volume warning:** The minimum volume in the tank that will trigger a warning to inform that product level is low and might require refilling.

> **Low volume alarm:** The minimum volume in the tank that will trigger an alarm indicating that product level is low and might require refilling.

> **High water alarm:** The maximum level of the water in a tank that will trigger a water level alarm. This is measured in meters and must be less than the diameter of the tank.

Temperature:

> **Upper halo:** The maximum temperature allowed for manual entry.

> **Lower halo:** The minimum temperature allowed for manual entry.

Tolerance:

> **Gain:** The volume tolerance for gain. This should always be a positive value. This is used for fuel reconciliation.

> **Loss:** The volume tolerance for loss. This should always be a positive value. This is used for fuel reconciliation.

2.9 Tank Gauges

This page provides configuration for tank gauges connected to Enabler.

Press the **Add (Tank Gauge)** button to setup a new Tank Gauge and enter the details in the **Tank Gauge Details page**. You can connect one or more Tank Gauge to each Enabler server.

Note: A port must be configured with the correct protocol for the tank gauge being added.

The **Edit** button will open the **Tank Gauge Details page** of the selected tank gauge.

The **Delete** button will remove the selected tank gauge.

2.9.1 Adding/Editing a Tank Gauge

Name: Enter a name to identify the tank gauge.

Number: A logical number to identify the current tank gauge.

Description: Enter your description of the Tank Gauge (optional).

Port: Dropdown list to select the port used for tank gauge communication. The tank gauge type **must match** the protocol selected for the communication port.

Type: Dropdown list of tank gauge types supported by Enabler. Select the tank gauge type matching the equipment you have connected to the communication port. The tank gauge type determines the levels and features that are available to Enabler. Check our website for more information about connecting Tank Gauge equipment.

Tank Gauge Type Features: (A read only) ticks to indicate the features available of the current tank gauge. Enabler has five types of tank gauge features:

Item	Indicates that the Tank Gauge
Gauge Volume	Provides product volume as well as product level. Also known as Gross Observed Volume (GOV).
Gauge TC Volume	Provides a Temperature Compensated (TC) product volume. Also known as Gross Standard Volume (GSV)
Water Volume	Has a float to provide the volume of free water at the bottom of the tank.
Temperature	Provides measurement of the product temperature.
Density	Provides measurement of the product density.

2.10   Attendants

This page provides configuration for Attendants in Enabler.

The **Add Attendant** button will create a new Attendant and take you to the **Attendant Information** page to enter the details.

The **Edit** button will open the configuration page for editing a selected attendant.

The **Delete** button will remove the selected attendant.

2.10.1   Adding/Editing an Attendant

Attendant Information:

Name: A reference name for the Attendant.

Number: A reference number for the Attendant (any non-zero positive integer).

Logon ID: The Logon ID associated with the Attendant

Password: The password associated to the attendant. It can be blank.

Password Validation: To confirm the entered password.

Tag Activate: To assign a Tag to the current attendant.

Attendant Tag Information:

Tag: The tag that has been assigned to the current attendant

2.11   Tags

The page provides configuration of tags that used to assign to attendants.

The **Add Tag** button will create a new tag and take you to the **Tag Information** page to enter the details.

The **Edit** button will open the configuration page for editing a selected tag.

The **Delete** button will remove the selected tag.

2.11.1   Adding/Editing a Tag

Tag Information:

> **Tag Number:** A reference number for the Tag (any non-zero positive integer).

> **Tag Data:** A unique data of the tag (Numeric and Letters).

> **Description:** Enter your description of the Tag (optional).

> **Date Scanned:** Display the date/time when the tag was first added to the system (read-only).

> **Read Tag Data:** Sets the Tag Data field to the recent Tag Data read by the system.

2.12   Tag Controllers

This page provides configuration for standalone tag controllers and their associated readers connected to Enabler. Tags can be used to identify Attendants, Customers and Vehicles etc.

The **Add Tag Controller** button allows multiple Tag controllers to be assigned to an Enabler Port. This button will only be available if Tag controllers Ports have been configured.

When multiple controllers are shown, **clicking** on a Controller row will display the Tag Readers associated with that Controller.

The **Add Tag Reader** button allows a Tag Reader to be assigned to a Tag Controller. The number of Tag Readers that can be assigned to a Tag Controller will depend on the Tag controller type being used.

The **Clone Tag Reader** button allows the mass creation of tag readers based on an existing one. It will only be displayed if there is at least one tag reader available to clone.

2.12.1   Adding/Editing a Tag Controller

Tag Controller Details:

> **Port Name:** The port and protocol that this Tag Controller is assigned to. See ports page.

> **Type:** The type of Tag Controller to be added to the port. There may be multiple models of Tag controller from a manufacturer.

> **Name:** A descriptive name assigned to this Tag Controller. This could be its location.

> **Number:** Logical number of Tag Controller.

> **Polling Address:** This is the address of the Tag Controller being configured. This will need to match what has been set up on the actual device.

2.12.2   Adding/Editing a Tag Reader

Tag Reader Details:

Tag Controller: The Tag Controller this Tag Reader is assigned to.

Name: A name to assign this Tag Reader. By default, it's "Tag Reader" followed by controller number and reader number. But any name can be given to it.

Number: Logical number of this Tag reader.

Polling Address: This is the address of the Tag Reader on the Tag Controller. This depends on the type of Tag Controller but it's normally the channel number the reader is connected to.

Pump: This is the pump the Tag Reader is associated with. This will be the pump number that is fired as part of the Tag Events; or if Automatic Authorisation by Tag Read is set up, then this is the Pump that will be authorised.

2.12.3   Cloning a Tag Reader

Clone Tag Reader Details:

Tag Reader To Clone: The source tag reader to clone from. This can only be from the current tag controller selected. If selected tag reader has a pump assigned then cloned readers will map to logical pump equivalents if available.

Number to Clone: How many tag readers to create based on selected tag reader. Limited by the max number of tag readers available for this tag controller.

3 Operation

This submenu provides site wide configuration and to setup forecourt grades and forecourt devices for the site.

3.1 Site Monitor

The Site monitor page allows remote monitoring of the forecourt at real-time.

Each pump shows the following information:

Pump Number

Pump status icon

Current delivery

Grade

Current delivery value and
Volume

Selected Pump border

Each Tank shows the following information:

Tank number

Tank name

Status Online/Offline

Tank product level

Ullage (available space)

Water level

Product Volume

Web link to events report for
this tank

Button functionality:

The **All Stop** button will prevent all pumps from commencing fuel delivery and stop all pumps that are delivering fuel.

This button does not show when the user has Read-Only access.

The **Authorise** button will authorize the selected pump. This button will also unblock the selected pump if it has been blocked (e.g. if it was stopped) and authorize it.

This button does not show when the user has Read-Only access.

The **Cancel Authorise** button will cancel the authorization of the selected pump if it has been authorised. This button will also unblock the selected pump if it has been blocked (e.g. if it was stopped).

This button does not show when the user has Read-Only access.

The **Stop** button will prevent the selected pump from commencing fuel delivery and if delivering fuel will stop it from doing so.

This button does not show when the user has Read-Only access.

When delivering, the **Pause** button will suspend fuel delivery until the Resume button is pressed.

This button does not show when the user has Read-Only access.

When delivering and if the selected pump has been paused, the **Resume** button will allow that pump to resume fuel delivery.

This button does not show when the user has Read-Only access.

The **Unlock Deliveries** will unlock the selected pump's deliveries that were locked on a disconnected terminal. Otherwise it has no function.

This button does not show when the user has Read-Only access.

The **Test Delivery** button will clear the current delivery from the selected pump and will label it as a test delivery.

This button does not show when the user has Read-Only access.

The **Drive Off** button will clear the current delivery from the selected pump and will label it as a driveoff.

This button does not show when the user has Read-Only access.

The **Events** button will show all events listed for the selected pump.

The **Deliveries** button will show all deliveries listed for the selected pump.

3.1.1 Unlock Deliveries confirmation page

This is the Unlock Delivery Confirmation page.

3.2 Site Mode Change

The Site Mode Change screen shows the Site modes available in the system and allows a Site mode to be activated.

The **Activate** button will force the selected profile to be activated.

For more information on Site Modes see the **Site Modes** configuration page.

3.3 Grade Prices

The Grade prices screen provides the ability to quickly set and change grade prices.

The **Grade Type** dropdown will only be shown if there are Post-Mix Grades available.

Prices for Base Grades and Fixed Blending Grades are displayed at the first section of the page. The Grade Prices for each Price level (designated by a column each) may be edited and saved accordingly by clicking the **Save Changes** button.

Post-Mix Grades for each Ratio are displayed at the bottom part of the page. The Grade Prices here are read only as they're usually auto computed.

For more options with Grade Pricing, please use the **Grade Price Profiles** page.

3.4 Grade Price Profiles

The Grade Price web page is used to set variable prices at scheduled times for each individual grade.

The **Add Profile** button will create a new grade price profile.

The **Set Profile** button will activate the selected profiles for each Grade.

The **View** button will list the price profiles for the selected grade.

The **Edit (Price)** button will open the Price Profile Price form for the prices of the selected Price Profile.

Post-Mix Grade Price Profiles (when available) are displayed at the bottom of the page.

3.4.1 Setting Grade Price Profile

The Price Profile drop down list allows selection of the price profile for each grade. Use the **Set Profiles** button to activate the selected price profile which will update all the grades to the selected price profile.

After clicking the **Edit** button, you will see the price profile edit screen for a single grade:

Pressing the **Set Active** button will set that profile as the active price profile for the selected grade.

3.4.2 Grade Price Profile Details page

Price Profile Prices:

Grades: The grade for the price profile.

Price Profile: Free-form name for the price profile.

Scheduled start time: The date and time for the price profile to become active, and will trigger a grade price change for the affected pumps. This is only applicable if you have more than one Price Profile for a grade. When you have only one Price Profile it is always active.

Standard Price Levels:

Default: The default price level for the Price Profile.

3.5 Blocking

The blocking screen is used to prevent pump fueling for specific grades, tanks or pumps.

Use the Device Selection drop down to select:

- Grades

- Tanks

- Pumps

- Attendant

- All Devices

The **Attendant** option will only be listed if the **Support Attendant** option is turned ON in the **Features & Options** page.

The page below shows all blocking options – by selecting the **All Devices** option.

To prevent pump fueling for a Grade Tank or Pump, untick the 'Enabled' checkbox and press the **Save** button.

For Tanks, Enabler also provides **Auto Blocking** to prevent further pump deliveries when a tank level falls below the Tank low alarm level.

3.5.1 Blocking Hoses

As well as preventing pump use for specific grades, tanks and pumps, Enabler also provides the ability to prevent pump use for specific hoses. As shown in the Hose Blocking screen below:

To prevent a specific hose being used, untick the 'Enabled' checkbox and press the **Save** button.

3.5.2 Blocking Attendants

The Enabler allows preventing an attendant from authorizing a delivery via blocking page with blocking reason as Manually Blocked.

Also, the blocking page allows to unblock an attendant in order to let the attendant keep authorizing deliveries, however, if an attendant has been blocked because of over float limit, then the attendant cannot be unblocked via blocking page, and the attendant needs to do a safedrop before unblock.

3.6 Blocking Overview

The Blocking Overview indicates each pump hose where fueling is prevented by a 'block'. This also indicates a brief description of blocking reason.

Screenshot above shows an example where pump 1 has been blocked because hoses 1, 2 3, and 4 are blocked.

And Attendant 1 has been manually blocked.

To view or edit the configuration where the block has been set, press the button that appears in the **Blocking Reason** column (in this case **Pump**).

Another example of blocked hoses 1 & 2 due to 'Tank's level low', when:

- 'Disable Tank on Low Level Alarm' is checked in Features & Options page and

- The level of the product for hoses 1 & 2 have dropped below the 'Low volume alarm' in the Tank.

Similar behaviour and representation when hoses are blocked due to 'Tank's delivery' event and 'Disable Tank on Tanker Delivery' is checked in Features & Options page (see also screenshot).

3.7 Fallback Control (Enabler Embedded Only)

3.7.1 Fallback Mode

Fallback Mode is a new feature in Enabler Embedded, to allow the normal operation of pumps when all the client applications (e.g. POS) are disconnected by allowing pumps to continue trading fuel even though no site system is connected to Enabler Embedded.

The following options are available when the system is in Fallback Mode:

- Pumps will be auto authorized.

- The delivery stack is set at maximum so all deliveries are stacked.

3.7.2 Overview

This page provides an overview of pumps and their 'fallback' status. Specifically, it shows which pumps are enabled for manual or automatic fallback, as well as the option to toggle the state of manual fallback pumps.

Number of active clients: The number of POS client applications that are connected to Enabler. The system will automatically switch the **Auto Fallback Pumps** into fallback state if the number of active clients is 0 (zero) and the pumps are configured for 'Auto Fallback'.

The list of **Auto Fallback Pumps** and **Manual Fallback Pumps** displays the pumps that are enabled for the current profile and fallback state.

Pumps in manual fallback mode are switched on and off by clicking on the **Force Fallback State Change** button. The **Force Fallback State Change** button is displayed when pumps have manual fallback configuration in the active site mode/pump profile.

The **No Fallback Pumps** is a list of pumps that are not set for any fallback option.

4 Fuel Reconciliation

On Enabler Desktop, the Fuel Reconciliation submenu includes Wetstock Management and Fuel Reconciliation Reporting.

On Enabler Embedded only Wetstock Management is available.

4.1 Wetstock Tank Data

Number	Tank Name	Gauge TC Volume	Temperature	Gauge Volume	Ullage	Level	Probe Status	Water Volume	Water Level
1	Regular tank	10,000.000	15.0	10,200.000	7,800.00	1.00	Online	200.000	20.00
2	Pulp tank	8,014.400	14.0	8,120.000	9,880.00	0.80	Online	120.000	12.00
3	Diesel tank	9,048.600	12.0	9,100.000	8,900.00	0.90	Online	50.000	5.00
4	CNG tank	5,018.000	13.0	5,050.000	12,950.00	0.50	Online	100.000	10.00
5	LPG tank	8,000.000	15.0	8,200.000	9,800.00	0.80	Online	200.000	20.00
6	Lubricant	0.000	0.0	0.000	0.00	0.00	Not Configured	0.000	0.00

To select the Tank data to view, use the **Data View** drop down and select one of these options:

- **Basic** data,
- **Gauge** data
- **All** data.

NOTE: The Book Stock column is not available in Enabler Embedded version.

4.2 Wetstock Pump Data

To select the pump data to display, select the pump and a Data View option from the list:

- **Basic** data (as shown above)
- **Turnover** data
- **All** data

4.3 Fuel Reconciliation (Enabler Desktop only)

The Fuel Reconciliation application provides a stock reconciliation process for wet/fuel stock on the site. The Fuel Reconciliation compares the change in stock volume in a tank with the measured volumes of fuel added and removed during each **Day** report period. The Fuel Reconciliation page allows details of fuel movements to be entered, and then to generate a wet stock reconciliation report.

4.3.1 Fuel Reconciliation Process

The Fuel Reconciliation page provides a work-flow process for Wet Stock data entry where all the steps must be followed before the corresponding report can be printed. The **Report** button will only be available if the data entry is completed and marked as "Done".

The Fuel Reconciliation work-flow is as follows:

1. Enter the opening stock level (for the first day period only)

2. Enter the tank movements for the open period (e.g. tanker deliveries or tank transfers).

3. Close the day period through your POS application.

4. Enter the closing tank dips data (if automatic tank gauges are not used or are not online).

5. (Optional) Enter the tank movements for the closed period if not already done when the period was open

6. (Optional) Enter the closing pump volume meter readings (most pumps provide electronic readings).

7. View/Print the Fuel Reconciliation Report.

Note: The first fuel reconciliation is done slightly differently since there are no prior periods. In this case, it is important that Opening Dip values are entered via the Opening Dips button. These can be entered or adjusted later on.

4.3.2 First Fuel Reconciliation period

The very first fuel reconciliation period requires an Opening Stock Level value to be entered manually to initialise the stock data.

Click the **Opening Stock Level** button in the Edit column to enter the initial Stock Levels.

The Opening Stock Level button

4.3.3 Opening Stock Level

The Opening Stock Level screen allows for the initial stock values to be entered into the system before the site begins trading in the first fuel reconciliation period.

Press the **Edit** button to enter the stock level for each individual tank.

Press the **Return** button to return to the main Fuel Reconciliation screen.

The **Read ATG Levels** button when an Automatic Tank gauge is used instead of using manual dips.

Note: The Read ATG **Levels** button requires an Automatic Tank Gauge setup already in the Enabler system using the Tank Gauges page in Configuration.

4.3.4 Adding Opening Stock Levels

Fuel Volume (Open): The opening volume of fuel in the tank.

Water Volume (Open): The opening volume of free water in the tank. Before this reading can be saved, the Fuel Dip Volume must be first entered. Also, the data entered must not exceed the specified Fuel Dip Volume.

Fuel Temperature (Open): The opening fuel temperature reading. Before this reading can be saved, the Water Volume reading must be first entered.

Fuel Density (Open): The opening fuel density reading. Before this reading can be saved, the Temperature reading must be first entered.

Tick the **Save** checkbox if you want the entered reading to be saved. This checkbox is no longer displayed once the reading has been saved.

Dip Type: Select either **None**, **Dip Stick** or **Manual ATG Sensor.**

Cancel (Button): To discard any entered data and return to the previous page.

Save (Button): To save the entered data.

Copy Volume Dip Type: To copy the User ID and Dip Type from the Fuel Volume block to all the subsequent blocks below.

4.3.5 Adding Dips

Adding Dips is similar to add opening dips and the dips page is accessed by clicking the Dips button for the relevant period. This will only be available if the **Tank Dips** option is ticked in the **Features & Options** page.

You will then see the dips entry page - similar to the Opening Stock level page:

To enter tank dip data, click on **Edit** in the Actions column.

If an Automatic Tank Gauge is connected, these readings will be automatically used unless you enter a manual reading.

The **Data Entry Completed** checkbox must be ticked for the dip data to be locked.

Press **Save** button save changes or **Cancel** to return to Fuel Reconciliation main page without saving changes to current screen.

The data entry page is similar except for the fields that are not Open. For example: Fuel Volume, not Fuel Volume (Open). For further information please refer to the Opening Stock Level section.

Press **Save** button save changes or **Cancel** to return to Tank Dips page without saving changes to current screen.

4.3.6 Tank Movements

The Tank Movements page will only be available for the <u>current open period</u> or if the **Tank Drops** option is ticked in the **Features & Options** page. This page allows entry of:

- Tank Deliveries (product added to a tank)
- Tank Losses (product pumped out of the tank)
- Tank Transfers (product transferred from one tank to another).

Tick the **Data Entry Completed** checkbox and then the **Save** button to lock the data. Press **Cancel** button to return to Fuel Reconciliation page without saving changes to current screen.

Adding/Editing Tank Deliveries

Date Time: The date and time of the delivery (must be a time during the day reporting period that is being reconciled).

Confirm date and time: Tick box to confirm that the entered date and time is correct.

Dispatch Volume: (optional) The quantity of fuel loaded onto the tanker. This field is required only for delivery variance calculations.

Drop Volume: The quantity of fuel delivered into the tank.

Received From: The measurement source of the delivered product. Either:

- Tanker meter (Truck Meter) or

- Manual calculation (Ticket).

Delivery Note Number: (optional) The delivery number associated with the delivery tanker.

Tank: The Tank that received the fuel delivery.

Unit Cost: (optional) The unit cost of delivered fuel.

Driver ID: (optional) The tanker driver's ID associated to this delivery.

Tanker ID: (optional) The tanker's ID associated to this delivery.

Details: (optional) Any further details to be recorded for this this delivery

Original Invoice Number: (optional) Required for tanker deliveries that measure variances. The original invoice number is the invoice number created when fuel was dispatched.

Dispatched Volume at Ref. Temperature: (optional) The dispatched fuel volume measured at the reference temperature (required for variance calculations).

Received Volume at Ref. Temperature: (optional) The received fuel volume measured at the reference temperature (required for variance calculations).

User ID: The username of the Enabler Web user who entered the tanker delivery information into Fuel Reconciliation.
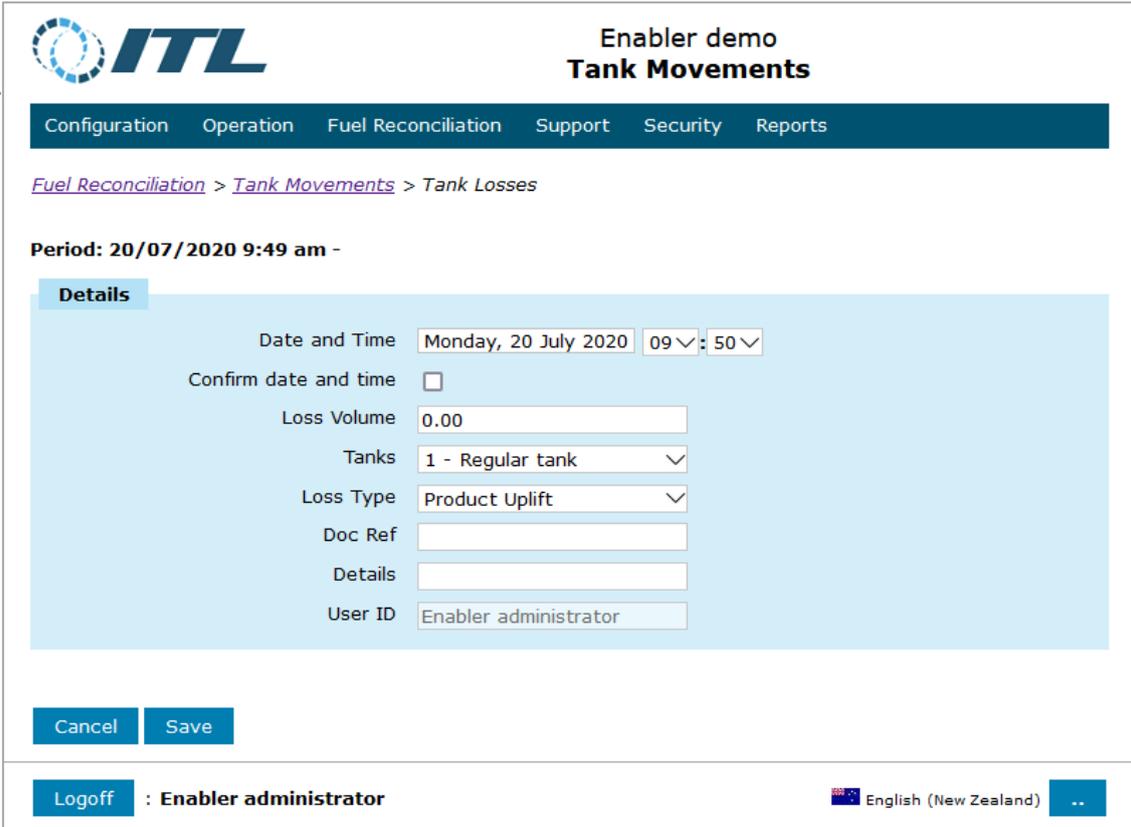
Temperature Variance: Variance caused by temperature (read only) of the dispatched versus received volume.

Variance at Reference Temperature: Variance of the dispatched versus received volume when measured at the reference temperature (read only).

Total Variance: Total variance between the dispatched and received volume (read only).

Press the **Save** button to store the delivery details, or **Cancel** to discard the data entered and return to the previous page.

Adding/Editing Tank Losses

Date and Time: The date and time when the loss occurred.

Confirm date and time: Tick box to confirm that the entered date and time is correct.

Loss: The quantity of product removed or lost from the tank.

Tanks: The tank from which product was removed.

Loss Type: Indicates the situation where product was removed – select one of the options:

- **Product Uplift** (product was removed or lost)

- **Water Uplift** (water was removed)

- **Empty** (entire tank was emptied)

Doc Ref: (optional) Reference the document with details of the loss.

Details: (optional) Further details or description of the tank loss.

User ID: The username of the Enabler Web user who entered the tank loss into Fuel Reconciliation.

Press **Save** button to commit and press **Cancel** to undo all unsaved changes and return to the previous page.

Adding/Editing Tank Transfers

Enabler demo
Tank Movements

Configuration   Operation   Fuel Reconciliation   Support   Security   Reports

Fuel Reconciliation > *Tank Movements* > *Tank Transfers*

Period: 20/07/2020 9:49 am -

Details

Date and Time	Monday, 20 July 2020 09 : 50
Confirm date and time	☐
Volume	0.00
From Tank	1 - Regular tank
To Tank	2 - Pulp tank
Transfer Type	Test Transfer
Doc Ref	
Details	
User ID	Enabler administrator

Cancel   Save

Logoff   : **Enabler administrator**   English (New Zealand)   ..

Date Time: The date and time of the tank transfer.

Confirm date and time: Tick box to confirm that the entered date and time is correct.

Volume: The volume/quantity of transferred product.

From Tank: The tank from which product was removed.

To Tank: The tank to which product was added.

Transfer Type: To indicate how the product transfer was done. Either:

- **Test Transfer** indicating the product was dispensed from a pump on the forecourt (as a test delivery), and then added to a different tank.

- **Tank to Tank** indicating the product was pumped directly from one Tank to another without using a forecourt dispenser.

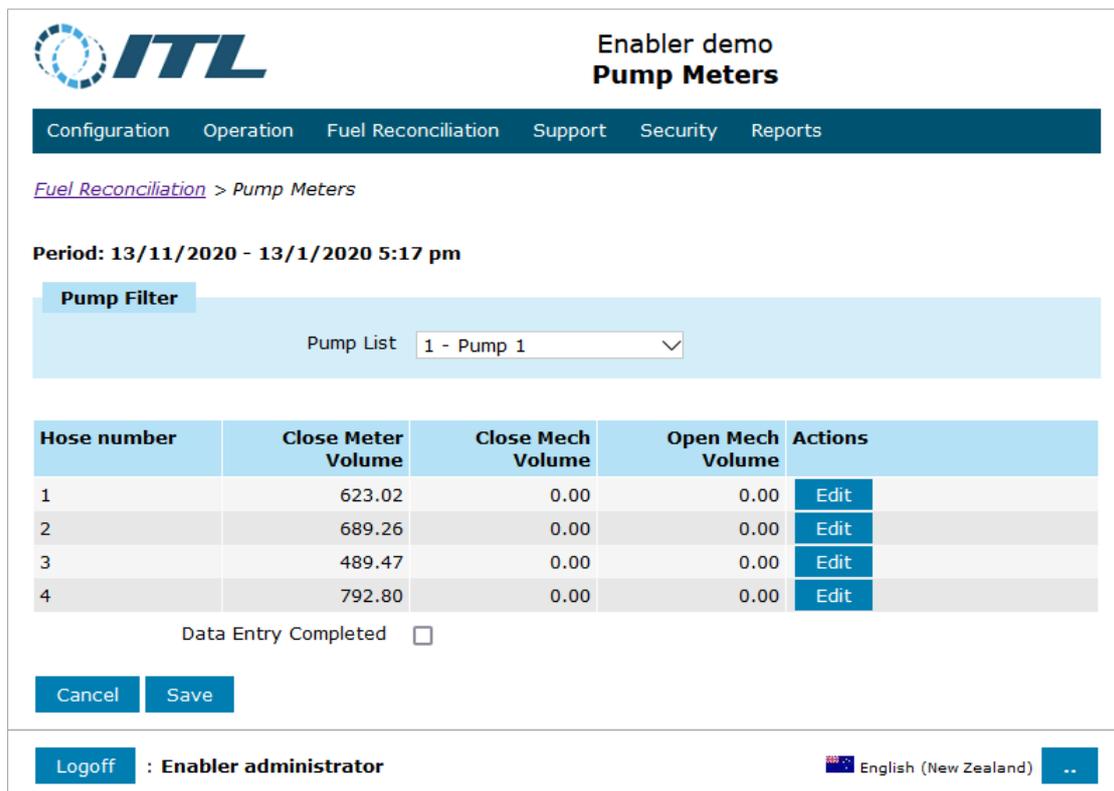**Doc Ref:** (optional) Reference to the tank transfer document.

Details: (optional) Further details to be recorded with the tank transfer.

User ID: The username of the Enabler Web user who entered the tank transfer into Fuel Reconciliation.

Press **Save** to store the transfer details, or **Cancel** to undo all unsaved changes and return to the previous page.

4.3.7 Pump Meters

The meters screen displays both the electronic and mechanical hose meter readings. It also allows entry of the mechanical hose meter readings after closing the period. This will only be available if the **Pump Meters** option is ticked in the **Features & Options** page.

Press **Edit** button in the Actions column to enter mechanical readings.

The **Data Entry Completed** checkbox must be ticked for the pump meter readings to be locked.

Editing Mechanical Meter data

This page is most commonly used for entering closing mechanical meters for a pump.

Close Meter Volume: The electronic closing meter volume – will be set automatically if the pump supports electronic totals.

Close Mech Volume: The closing mechanical pump meter volume.

Close Volume Turnover Correction: The adjustment that is added when a pump meter reaches maximum and resets to zero.

Close Money Turnover Correction: The monetary adjustment when a tank meter reaches maximum and resets to zero.

Open Mech Volume: The reading of the mechanical pump meter at the beginning of the report period. For the opening period you can enter this value. For subsequent report periods the open reading is copied from the previous period close reading.

Press **Save** button save changes or **Cancel** to return to Pump Meters page without saving changes to current screen.

4.3.8 Reports

After each of the data entry screens is marked as complete (the **Data Entry Completed** checkbox must be ticked), the **Report** button will appear in the Edit column. Click this to view the report for that period.

The report provides a reconciliation of wet (fuel) stock to summarise activity in each tank, as well as calculated variance by volume and by percentage of sales.

When data for the previous 5 days is available, a 5 day rolling variance is shown. When data for the previous 30 day is available, a 30 day rolling variance is shown.

Enabler demo
Fuel Reconciliation

| Configuration | Operation | Fuel Reconciliation | Support | Security | Reports |

Fuel Reconciliation > Reports

Print Report   Close

Daily Tank Reconciliation Report

Open Date: 11/11/2020 11:47:39 am
Close Date: 13/11/2020 5:15:56 pm
Period: 2

TankNumber	Tank-1 (Regular tank)	Tank-2 (Pulp tank)	Tank-3 (Diesel tank)	Tank-4 (CNG tank)	Tank-5 (LPG tank)
Linked To					
Product	Regular	Premium	Diesel	CNG	LPG
Capacity	20,000.000	20,000.000	20,000.000	20,000.000	20,000.000
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------
Initial Stock	2,000.000	0.000	0.000	0.000	0.000
+ Deliveries	-	-	-	-	-
- Transfers	-	-	-	-	-
Subtotal	2,000.000	0.000	0.000	0.000	0.000
- Pump Use	41.830	0.000	0.000	0.000	
= Book Stock	1,958.170	0.000	0.000	0.000	0.000
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------
Dip Stock	0.000	0.000	0.000	0.000	0.000
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------
Variance:					
By Volume	-1,958.170	0.000	0.000	0.000	0.000
By Percentage	----------	-	-	-	-
Variance Reasons					
5 Day variance from 1/01/0001 12:00:00 am to 13/11/2020 5:15:56 pm					
By Volume	-1,958.170	0.000	0.000	0.000	0.000
By Percentage	-100.00%	-	-	-	-
30 Day variance from 1/01/0001 12:00:00 am to 13/11/2020 5:15:56 pm					
By Volume	-1,958.170	0.000	0.000	0.000	0.000
By Percentage	----------	-	-	-	-
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------
Deliveries					
Note Number					
Tank Drop Volume					

I CONFIRM variances between delivery note volume and deliveries reported above are within tolerances

Signature:

_____
Approver's Name

Variance ID	**Variance Description**
1	Probe missing
2	Probe stuck
3	Tank moving at cutover time
4	Missing delivery (negative variance)
5	Delivery entered in wrong period (positive variance)
6	Dispenser maintenance activity
7	WSM application not running
8	Sales transactions during delivery
9	Delivery ticket data not available
10	Tank maintenance movement missing
11	Tank maintenance activity entered in wrong period
12	Tank stock data not entered at same time as turnover
13	Turnover data not synchronised with manual dips
14	Stage 1 VR system not working / under maintenance
15	Stage 2 VR system not working / under maintenance
16	Not known. Further Investigation required

Logoff   : **Enabler administrator**   English (New Zealand)

Tank: The tank number and name.

Linked To: Tank number (if any) to which this tank is linked to, including indirect links. Connected tanks are shown in adjacent columns of the report.

Product: The name of the Grade stored in the tank.

Capacity: The storage capacity of the tank.

Initial Stock: Opening stock reading (the closing stock reading from the previous period).

Deliveries: The nett volume of tanker deliveries into this tank during the report period.

Transfers: The sum of transfers into (or out of) this tank. Positive values indicate product added. Negative values indicate product removed.

Subtotal: Indicates the sum: Initial stock + Deliveries + Transfers

Pump Use: Indicates the sum of fuel removed from the tank by based on pump use recorded by Enabler. This includes all delivery types including those marked as Drive-off.

Book Stock: The current subtotal minus pump use

Dip Stock: For tanks that are manually dipped, this is the closing Dip volume. For Tanks with an automatic tank gauge, this is the Tank Gauge volume reading at the end of the day period.

By Volume: The dip stock minus the book stock

By Percentage: Variance as a percentage of pump use (100 * Variance / Pump Use). It is displayed 100% when pump use is zero and variance is not zero.

5 day variance by volume: Sum of Dip stock minus the Sum of book stock for the most recent 5 days.

5 day variance by percentage: Variance as a percentage of pump use (100 * Variance / Pump Use) for 5 days.

30 day variance by volume: Sum of Dip stock minus the Sum of book stock for the most recent 30 days.

30 day variance by percentage: Variance as a percentage of pump use (100 * Variance / Pump Use) for 30 days.

Note Number: An internal number generated for tank drops.

Tank Drop Volume: Volume of the delivery for that day.

The **Print Report** button sends the report to the selected printer. The **Close** button returns the user to the main Fuel Reconciliation page.

4.3.9 Approve for Export

Although Enabler does not include an export module, it does include the capability to mark data as approved for data export. Fuel Reconciliation App will only mark data for export after the data entry is complete.

Approve for Export button

Legend

●   **Ready for Export** – The data is ready to be exported.

✓   **Export Successful** – The data has been marked for export.

     Out of Variance – Indicates that there are period values out of variance.

Note:

1. Periods can only be exported only when previous periods area also ready to be exported. Approve for export will export **ALL** periods that are ready for export.

2. **Approve For Export** button only will show up based on the *Export Type* setting.

Approve for Export process

The Approve for Export screen shows reconciliation periods that have not yet been exported.

Status column indicates the corresponding row status, complete all indicated Data Entries will change the period ready to export.

Rows marked in red are incomplete and cannot be exported. Pressing **Approve All** button will mark all the ready periods as approved for export.

Note: Periods are approved in chronological order. The period will be marked as exported on the main Fuel Reconciliation page after approval.

Out of Variance

The Out of Variance values from fuel reconciliation are values that differ from the system calculations.

Out of Variance period

Note: Periods that are Out of Variance may be approved for export.

5 Support

The items in the support sub-menu provide information about Enabler system.

5.1 System Status

This page provides a summary of the running Enabler system.

Enabler Desktop

Enabler Embedded

System information:

System Uptime: The total time Enabler Server has been running (since boot up).

Pump Server Uptime: The total time the pump server has been running.

Enabler Release: The Enabler version number.

Forecourt Interface: The release date of the Pump Driver (Forecourt Interface) Update that is installed.

API version: The version of the API.

Pump Server version: The version of the Pump Server

Enabler Web Page version: The version of the Enabler Web Page.

System Version: The Enabler Server operating system version.

Enabler PCI/Express / Enabler Ethernet / Interface Card: Firmware versions of the Enabler Cards setup for the system.

Download System Summary: Downloadable text summary report for the current Enabler System Information and Configuration.

Certificate information:

NMI AUS Certificate of Approval: The pattern approval number issued by the National Measurement Institute of Australia for Enabler Express, Enabler Ethernet and Enabler Embedded.

NMO UK Evaluation Certificate: The evaluation certificate number issued by the National Measurement Office of the United Kingdom for Enabler Express and Enabler Ethernet.

NMi Certin B.V. Evaluation Certificate: The evaluation certificate number issued by the Netherlands Measurement Institute for Enabler Express.

Pump Server Version/Hash: A green tick indicates that the Pump Server service is valid and has not been tampered with.

Enabler Web Pages Version/Hash: A green tick indicates that the Enabler Web Application is valid and has not been tampered with.

Overall status: A green tick indicates no errors in the system, otherwise a red 'X' is displayed and errors in the current system configuration will be displayed in the Forecourt Controller status block below.

Forecourt Controller status: This indicates the status of Enabler Pump Server and Enabler Card(s). Green tick indicates normal operation, and red tick indicates an error condition.

Pump Status: A green tick indicates all pumps are online (communicating correctly). Otherwise, a red 'X' indicates errors with the connected pumps and also reports how many pumps are configured correctly. Any pumps that are not responding will be indicated with a link to the Events report so you can view the most recent events for the pump.

Tanks Status: Only visible on systems setup to connect with Tank Gauge equipment. As for pumps this indicates the status of any connected Tank Gauge probes.

Interface Information: Display of ports in use, along with the version and name of the driver loaded.
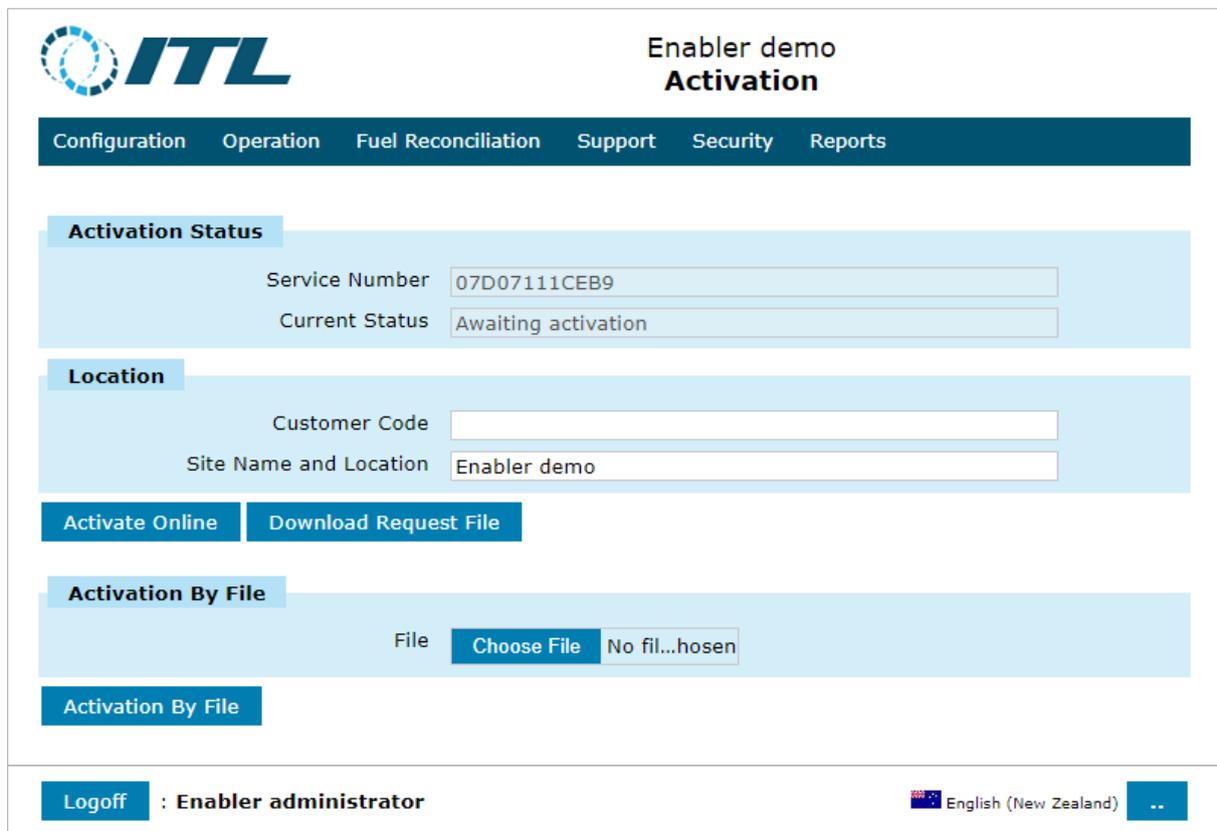
5.2 Activation

For Enabler Desktop systems running on V4.5.0 (or newer) with an Express Card installed; or Enabler Embedded systems on V1.2.0 (or newer), then **Software Activation is no longer required.** The Activation menu link will be no longer available.

If your system is based on older software releases or has an Enabler PCI card installed, then please refer to this section on how to Activate.

The Enabler system software must be **activated** by ITL's License Server to be fully operational after first installation. The Enabler system can be activated by:

- Online Activation
- File Activation

Activation Status:

Service Number: The hardware ID of your Primary Enabler Card or Enabler Embedded system.

Current Status: Indicates whether the Enabler system is:

Awaiting activation: System is not activated. Until activated other functions are disabled.

Activated: System activated and all functions are available and operational.

Activated – TRIAL EXPIRES: xx/xx/xx: Indicates your system was previously activated but your Enabler Hardware has been swapped. The system remains activated temporarily until the activation is repeated with the new Service Number. System will be return to disabled (Awaiting activation) after the trial expiration date indicated on TRIAL Expire time xx/xx/xx.

Location:

> **Integrator Code:** Your Integrator code. The following icon indicators will be displayed as you type in your integrator code:
>
> - ···   - more characters required
> - ✖   - invalid characters or invalid integrator entered
> - ✓   - valid integrator code
>
> Please contact ITL if you do not know your Integrator Code.
>
> **Site Name or Location:** The Site Name by default, it can be edited at the time of activation.

Activation By File:

> **File:** Either the Activation Response file provided by ITL support or the Activation XML File after a successful activation of the Enabler (refer to **Save Activation Info**).

The three available action buttons are:

Activate Online: For Online Activation of the Enabler.

Activate By File: For File Activation of the Enabler.

Download Request File: To save an Activation Request File from your system.

The Online **Activation** and **File Activation** are detailed below.

5.2.1 Online Activation

Check the prerequisites below before attempting an Online Activation.

- The Enabler system reports the **Service Number**.

  o Service Number N/A (Not available) is reported when the Pump Server is not running; the Enabler Card was not detected or system reboot is required.

- The Enabler system is connected to the internet.

  o ITL's Activation Server (**www.integration.co.nz**) is accessible from the Enabler system.

- You have entered your Integrator Code correctly (the code is <u>**case sensitive**</u>).

- You have available Enabler licenses.

Press the **Activate Online** button to continue. Activation processing is normally completed within a few seconds. If Activation does not succeed, a message indicating the result will be displayed. If activation succeeds, the Pump Server will be restarted to activate your Enabler Server.

After successful activation, the activation buttons are replaced by a **Save Activation File** button, and the Enabler system will be fully functional.

5.2.2 File Activation

File Activation is provided for:

- Sites without internet access.

- Enabler servers that cannot connect to our license server due to network/firewall restrictions.

- Integrators requiring pre-deployment setup of Enabler systems

File Activation requires that your **Integrator Code** has sufficient Enabler licenses available (these are maintained in our License Server). The steps in the process are described below:

- Enter your Integrator Code into the **Integrator Code** field.

- Click **Download Request File** to generate an ActivationRequest_xxxx.xml and save it on your PC.

- Email the Activation Request XML file as an attachment to **support@integration.co.nz**.

- ITL support will reply with an Activation Response XML file. The support team normally respond within 24-48 hours (Monday thru Friday New Zealand time).

- Press the **Browse** button in the **Activate By File** and select the Activation Response XML file received from ITL support.

- Finally, click **Activate By File.**

If the activation file is valid, the Enabler system will be activated within a few seconds, and the Pump Server will be restarted. The Save Activation File button will appear and the Enabler system will be fully functional.

5.2.3 Activation problems

For any issues or questions about activation contact **support@integration.co.nz** with all the following information:

- AutoSupport Logs

- Activation Request file (if applicable)

5.2.4 Save Activation

The **Save Activation File** button allows you to save the activation details in case you need to reinstall Enabler, or transfer the Enabler Card and license to a new computer.

Pressing the **Save Activation File** button will download the **Activation Details** into an XML file that you may use later on for **File Activation**.

5.3 Network Settings

This page allows the user to configure the Network or Ethernet settings of the Enabler system.

This is available on Enabler Embedded, and Enabler Desktop v4.10.0 and later.

Note: The user may get disconnected from the system while changing these network settings.

Enabler Embedded

Enabler Desktop

General:

> **Host Name:** The Windows NetBIOS hostname of the machine.
>
> **SSL Enabled:** Whether SSL is currently enabled.
>
> > See **SSL Configuration** for more details.

SSL Certificate Details (SSL only):

> **Subject:** The Subject Common Name of the current certificate.
>
> **Expiry Date:** The Expiry Date of the current certificate.

IP Address (Embedded only):

> **Enable DHCP:** Whether to use DHCP or Static IP.
>
> **Static IP Address:** IP Address to use when DHCP is disabled.
>
> **Subnet Mask:** Subnet Mask to use when DHCP is disabled.
>
> **Default Gateway:** Default Gateway to use when DHCP is disabled.

DNS Servers (Embedded only):

> **Primary DNS Server:** DNS server used by Embedded (0.0.0.0 for default).
>
> **Secondary DNS Server:** Secondary DNS server (0.0.0.0 for default).

5.3.1 SSL Configuration

Enabling SSL (Secure Sockets Layer) will ensure that TCP/IP endpoints from the Enabler Embedded (Web Server, Enabler Forecourt and REST API) to the client will be secure and encrypted.

To enable SSL:

- (Embedded) Change the Host Name to something other than "WindowsCE".
  - o Ensure that this Host Name is unique to the network.
- Check the **SSL Enabled** checkbox.
  - The following fields will appear.

- If using your own certificate, select **Upload certificate**.
  - o Upload a PKCS#12 (.pfx) certificate file.
  - o Enter the password of the .pfx file into the **Certificate Password** field.
- If you don't have an SSL certificate, select **Generate self-signed**.
- Click **Save Changes**. The following confirmation page will be displayed.

- If an SSL certificate was provided, verify the details of the certificate.

- Click **Yes** to proceed. Enabler will then restart.

Once restarted, the Enabler Web Applications login screen can be accessed by browsing to the **https://** URL of the computer name or IP address with the port **443** (optional).

https://10.1.1.118

https://10.1.1.118:443

Once SSL is enabled, your web browser may indicate that Enabler Web Applications is **Insecure**. If a certificated was provided, ensure the Root Certificate Authority (CA) has been added to the host machine's certificate store. If using a generated self-signed certificate, an exception in the web browser must be added.

To disable SSL:

- Uncheck the **SSL Enabled** checkbox.

- Click **Save Changes**. A confirmation page will be displayed.

- Click **Yes** at the confirmation page to proceed. Enabled will then restart.

Once restarted, the Enabler Web Applications login screen can be accessed by browsing to the **http://** URL of the computer name or IP address with the port **8081**.

http://10.1.1.118:8081

If your web browser continues to redirect to the old **https://** url, clear your web browser history/cache.

5.4 Remote Alert Setup

The Remote Alert Setup page enables configuration of the new remote alert functions, which can automatically send system alerts to an email recipient.

The remote alert function is disabled by default.

Alert Location: Name of the site location to include in alert emails.

Alert Level: The alert level determines which system events generate an alert:

- Critical, Errors and Warnings
- Critical and Errors
- Critical only

Alert Method: To select the available methods for alerting (currently):

None: No remote alerts are sent (disabled).

Use Email: Send remote alerts via email.

Email Alert and Connection settings are displayed when the **Use Email** option is selected.

5.4.1 Email Alert settings

The following substitutions are available for the Email subject and template fields:

@NAME@	Site name from Site Settings
@LOCATION@	Alert Location
@ALERTS@	List of latest alerts
@ALERT@	Single latest Alert

From Email Address: The email address to use for outgoing alert emails.

To Email Addresses: A list of email addresses to send the alerts to, separated by semicolons.

Email Subject: The subject of the alert email, which can contain predefined macros. See below for details.

Email template: The template for the alert email body, which can contain predefined macros.

These macros will be substituted accordingly when the email is sent.

@NAME@ Inserts the site name from Enabler Site Settings.

@LOCATION@ Inserts the Alert location configured at the top of the page.

@ALERTS@ Inserts up to 20 latest events from the Event Journal that meet the configured Alert Level. For Email template only.

If there are more than 20 new events, then they will be grouped into multiple emails with the oldest events first.

@ALERT@ Inserts the latest event from the Event Journal that meets the configured Alert Level.

If there are many new events, then they will be sent as individual emails with the oldest events first.

Cancel: Clear any changes to the form

Save: Save and apply the Remote Alerts configuration

Send test email: Tests the current configuration by sending an email.

Changes will not be saved.

NOTES:

Either the @ALERT@ or @ALERTS@ macro must be used for Remote Alerts to function, and only one of these can be used at a time.

When creating a template consider the target of the email. For example, the size of email may be limited if your emails are relayed via an SMS gateway.

When Remote Alerts are first enabled, events from the last 7 days that meet the Alert Level will be sent, and then after that only new events will be sent.

5.4.2 Connection settings

The alert email connections setting defines the parameters required to communicate with a SMTP server.

Email server name: The network name of the SMTP service host computer.

SMTP port: TCP/IP port number used to communicate with the SMTP server.

Use Security: Options for: No security, SSL/TLS security and STARTTLS security.

Email User Name: The user's name used to login to the SMTP server.

Email logon Password: The password associated to the user's name for login to the SMTP server.

Which Security option should I use?

Typically, if your provider asks to use port 465 you would choose *SSL/TLS*.

If the port number is 587 choose *STARTTLS*

Note: If you intend to use Google's SMTP server (smtp.gmail.com), ensure that the account you use have the **Allow less secure apps setting** to **ON**. This setting is under the Sign-in & Security options for your google account.

5.5 Logs

The Logs page is provided so you can get diagnostic logs from the Enabler system.

If you need to escalate an issue to our support team, Enabler system logs should be zipped and sent for diagnosis and evaluation.

This is available on Enabler Embedded, and Enabler Desktop v4.10.1 and later.

> ### Note:
>
> On Enabler Desktop installations, logs can also be collected using the AutoSupport tool. The Logs webpage uses AutoSupport internally to collect the logs.
>
> Refer to our Support FAQ page for more information:
>
> **https://integration.co.nz/support/**

The Logs page displays a table of compressed logs ready to download, alongside the following actions:

Download: Download the selected compressed log file.

Delete: Delete the selected compressed log file.

Keep (Embedded Only): Prevent the compressed logs file from being automatically purged or deleted.

> **Note:** The compressed logs files may be automatically purged from the system unless the Keep parameter is set as 'Yes'.

5.5.1 Compressing Log Files for Download

To create a compressed log file:

1. Select the **number of days of logs to compress** from the drop-down list.

2. Click the **Compress logs ready for download** button.

During log collection, a progress bar showing current log collection progress will be displayed.

Cancel (Desktop only): The log collection can be cancelled by clicking the **Cancel** button.

If log collection fails, the log collection output will be displayed on the page.

Return: Returns to the Logs page with list of compressed log files.

5.6 Backup and Restore (Enabler Embedded Only)

This page provides backup and restore functions for the Enabler Embedded configuration including the historical totals and external tags.

The **Available System Backup Files** Section lists the automatically generated and uploaded backups with the option to download or restore the System backup. There is a limit of up to seven (7) System backups stored in the system, oldest backup will be deleted whenever a new backup is created or uploaded.

Press **Download** to download the System backup file for the current user.

Press **Restore** to restore the selected System backup into the system. This will also delete all existing External Tags from Enabler (requires user's confirmation).

Press **Backup Now** to create a new System backup of the system which will be inserted as the latest backup (if there is none for today) or replace today's backup.

The **External Tag Backup File** Section lists the External Tag Backup file which can be restored, downloaded and deleted. The total number of External Tags stored is also displayed. There can only be one External Tag backup that can be listed. Older backups will be automatically deleted once the new backup has been uploaded.

Press **Restore** to restore the External Tags from the backup file into the system (requires user's confirmation).

Press **Download** to download the External Tag backup to a local folder.

Press **Delete** to delete the External Tag backup. This will also delete all existing External Tags from Enabler (requires user's confirmation).

5.6.1 Upload Backup and Restore

The **Upload a Backup file** Section can be used to upload a System backup or External Tag backup file. It automatically detects the backup type and lists it accordingly into the correct section. If the zip file contains both System backup and External Tag backup, then it will be listed into the System backup section.

Press **Browse** to select a backup from your local system first and press the **Upload** button to upload it, it will be listed in the corresponding section depends on the contained file once upload is completed.

Pressing **Restore** after selecting a backup file will display a confirmation message similar to example below (System backup as example):

Please read the warning messages before Pressing **Yes** to confirm and begin restoring data from the backup file.

For System Backup, we recommend you download or save the delivery data before restoring a previous backup.

Note: The External Tag backup file must only contain ONE XML file for External Tags. Also, the External Tag backup filename must have the filename **ExternalTag***.zip (e.g. ExternalTag_20160419.xml, ExternalTag_Today.xml, etc.). Otherwise, the system will reject the file to be restored.

5.6.2 Automatic Backup settings

Database		
Backup time	01 ▼ : 00 ▼	
Backup files	3	

Automatic daily backups are configured on the Site Settings page backup.

It is recommended to set the backup time when the forecourt is not normally busy. There is a limit of up to seven (7) backup files stored in the system.

5.7 DateTime and Region (Enabler Embedded Only)

This page allows the user to change the current date and time, time zone and Regional settings.

The time zone is used for automatic day light savings when applicable and optional time synchronization.

The regional settings are used to customize the date and time, and currency format to the selected region.

5.7.1 Date and Time

To update date and time set the current date and time and press **Update date & time** button.
The **Current Date** can accept these formats:

Day/Month/Year
or
Day-Month-Year

Both 2 digit and 4 digit years may be used.

When the **Set Time Automatically** option is enabled, the manual date time entry will be disabled and the **Update date & time** button becomes a **Synchronise Now** button. This button will force a network time synchronization.

5.7.2 Time Zone

Select your time zone from the drop-down list and press the **Update time zone** button.

5.7.3 Set Time Automatically

Selecting the **Set Time Automatically** option will show the Internet Time Servers that are used to synchronise the time. 1 or 2 servers can be configured. By default, we use the general pool NTP servers. Clicking on the **Set to Defaults** button will reset the servers back to the default pool servers.

Press **Update time zone** to save the change.

When the **Set Time Automatically** option is on the manual time change will no longer be possible.

Time Zone	
Current Time Zone	(GMT+12:00) Auckland, We
Set time automatically	☑
Internet Time Server 1	0.pool.ntp.org
Internet Time Server 2	1.pool.ntp.org Set to Defaults

Update time zone

5.7.4 Regional Settings

Select your default system language and region from the **Default system language** and **Select Region** drop down lists and press **Update region** button to apply the change. The Number, Currency, Time, Short Date, and Long Date will be displayed with the selected regional settings.

If the Region is changed you will be prompted to confirm the change as the system will be restarted. If there are current deliveries present on the pumps, then an error will be shown and the update process aborted.

5.8 Software Installation

This page allows you to view the installation history and install software updates.

This is available on Enabler Embedded and Enabler Desktop v4.10.1 and later.

> ### Note:
>
> On Enabler Desktop, only Pump Driver Update installation packages can be installed through the Software Installation web page.
>
> On Enabler Embedded, it is recommended to set the **Activity timer to 180 seconds or more** in the **User/Roles** Security menu before uploading a file. You will need to log off and on again after changing the Activity timer.

Installed products:

Press **History** to display the installation history for a specific product.

Press **View installation history** to view the installation history for all products.

Available installation packages:

Press **Install** to install the software package.
Enabler may restart once installation is complete.

Press **Delete** to delete the software package.

Press **Browse** to upload a software package from your local system.

---

6 Security

The Security menu provides access control for the Enabler server. Here you can determine access for staff (Users and Roles) and client applications (Terminals).

Windows User Authentication is supported; see section below.

6.1 User/Roles

The User/Roles screen is used to configure user accounts and assign role rights.

Press the **Add New User** button to add a new user to the Enabler system.

Press the **Add Role** button to create a new role profile to define access for a group of users. Roles determine access to specific pages of the Enabler configuration web application.

Press the **Edit** button to edit an existing user or role.

Press the **Delete** button to remove a user or role. *Note*: The administrator account cannot be deleted.

6.1.1 Adding/Editing Users

Login name: The username for login to the Enabler web application.

User name: A free-form to enter the user name that will be displayed in the lower left side of the screen after login.

Password: The password associated to the username used for login. It cannot be blank and must be between 6 to 50 characters.

Password Validation: To confirm entered password.

Activity timer in seconds 0=no timeout: Sets the number of seconds of inactivity after which the user will be automatically logged out of the system (set to 0 for no login timeout).

User Role: The role to be assigned to the user.

Select user language: Sets the language for the user which can be the browser default language, the system default language or English.

Press **Save** to create the user after entering all the information.
Press **Cancel** to discard the data entered and return to the previous screen.

6.1.2 Adding/Editing Roles

Role Name: Free-form to enter a name for the role.

User Management: To allow/block or read only access to the security menu.

Configuration: To allow/block or read only access to the configuration menu.

Support functions: To allow/block or read only access to the support menu.

Reporting: To allow/block access to the reports menu.

Fuel Recon: To allow/block or read only access to the fuel reconciliation menu.

Grade price changing: To allow/block or read only access to edit grade prices.

Blocking: To allow access/block or read only access to grade blocking in the operation menu.

Site Monitor: To allow/block access to the site monitor page.

Site Mode Changing: To allow/block or read only access to the Site Mode Change page.

Note:

- Block will not show the page in the menus.
- Read only access displays the page but doesn't allow any changes to be made.

Press **Save** button to create the role once all the information has been entered.

Press **Cancel** to discard the data entered and return to the previous screen.

6.2 Terminals

A feature added in Enabler V4 and Embedded is access control for terminals (API client applications) and the ability to restrict API activities.

By default, the system allows any number of ActiveX clients to connect as in Enabler Version 3.

In order to use new API clients (.NET/Java/OLE) add a terminal for each ID. The terminal ID cannot be used by an ActiveX client once allocated to a new client.

The screenshot below shows a configuration allowing Terminal IDs 2, 3 and 4 to connect using a new API and ActiveX clients using other IDs to connect instead.

To allow only new API clients to connect, first disable ActiveX (Legacy) clients connecting by editing access for "Legacy Clients".

Click the **Add terminal** button to grant permission to a new client application.

Click the **Edit** button to modify a terminal's access settings.

Click the **Delete** button to revoke access for a client application.

6.2.1 Adding/Editing Terminals (API Clients)

This page is used for adding/editing Client API Application (Terminal) access.

Terminal ID (Non-legacy clients only): Number to identify the client application.

Terminal name: A free-form name for the terminal.

Password: Password required for the terminal to connect to the Enabler server (must be 6 to 50 characters in length).

Password Validation: To validate the entered password.

Connect to server: To allow a terminal to connect to the server.

Control forecourt: To toggle terminal forecourt control permissions.

Change forecourt configuration: To toggle terminal forecourt configuration permissions.

Allow mode changes: To toggle terminal site mode permissions.

Allow price changes: To toggle terminal grade price change permissions.

Press **Save** to update the terminal configuration with the information entered.
Press **Cancel** to discard any changes and return to previous screen.

6.3 Windows User Authentication (Desktop Only)

As of Enabler v4.7.0, the Desktop Web Application supports Windows Authentication on the Login page, without needing the users to be configured in Enabler. This feature does not require any setting to enable it as it is automatic.

Local Windows User authentication will be attempted if the user logging in is not an Enabler user. The Web login will try authenticate as a Local Windows user on the Enabler Server (not a local user on the client device).

Windows Domain User authentication will be attempted if the user is not an Enabler or Local Windows user, and only if the Enabler Server is joined to a domain.

Windows User Security:
An authenticated Windows User will only be logged into Enabler Web if they are a member of a Windows Security group with the same name as an Enabler Role.

Enabler Role Settings: *Windows User Groups:*

An authenticated Windows User who is a member of the Local Administrators group will be logged in as the Enabler Administrator.

To control Enabler access for a Windows User, configure the Enabler Role settings for the Role that the user is a member of. A session timeout of 10min will be used.

Windows Login Troubleshooting:

If Windows Authentication fails, the "*Invalid User name or Password*" message will be shown. Ensure that the Windows account exists on the Enabler Server or on the Company Domain, and that their Security Group name matches an Enabler Role.

Enabler Roles and Windows Security Groups are not synced or linked in any way, and are only matched by name. This feature is not available on Enabler Embedded.

7 Reports

The Reports submenu provides forecourt reporting for the Enabler.

7.1 Reports navigation

The Previous and Next buttons allow for browsing backwards and forwards through the data, while the middle dropdown allows to select how many records to be displayed per page (available results per page are 25, 50 and 100 records per page).

7.2 Export Page as CSV

The Export Page as CSV button is located at the bottom left corner of each Report page in all supported browsers.

Press **Export Page as CSV** to download the report table to your computer as a UTF-8 encoded CSV. The exported file will contain all table data that is visible on the page when the button is pressed, with all filters applied.

Export Page as CSV is only available in modern web browsers with JavaScript enabled.

7.3 Fuel Transaction

The **Report filter** allows specific results to be displayed in the report. To filter the results, select the options from the filter fields and press **Apply Filter** button to redisplay the filtered results.

Trans ID: The ID for the Fuel Transaction.

Pump: The name of the delivery pump

Client Ref: An application-specific reference provided by the client application (optional).

Client Act: An application-specific data used to indicate the type of transaction (optional).

Auth Date: The time and date of the fuel transaction.

Authorise Reason: Indicates where the transaction was authorized:

> **Client** indicates fueling was authorized by a client application (e.g. POS)
> **Auto** indicates fueling was authorized by the Enabler based on site mode confirmation.
> **Self** indicates fueling was authorized by the dispenser itself (some protocols only).

Auth By: The client application (terminal) authorizing the delivery. Has the value -1 if not authorized by a client application.

State: The current state of the fuel transaction.

Complete Reason: Indicator of how the transaction was completed.

If fuel was delivered, the following columns indicate the delivery details:

> **Hose Delivery ID:** The ID of the delivery.
>
> **Grade:** The name of the grade of the fuel delivered.
>
> **Hose number:** The number of the hose of the fuel delivered.
>
> **Volume:** The unit used to measure the fuel delivered.
>
> **Value:** The total cost of the fuel delivered.
>
> **Price:** The unit cost of the fuel delivered.

7.3.1 Fuel Transaction Report Filter

Listed below are the report filter options for the fuel transaction page.

Complete: The state of the transaction (i.e. Incomplete, Timeout)

Authorise: The source of the authorization of the transaction (i.e. Self, Not Auth)

Pump: The pump where the fuel delivery took place.

More Filters: To enable more filter options.

Start – Date and Time: The starting date and time of the Fuel Transactions to be included in the report. This defaults to the timestamp of the oldest Fuel Transaction.

End – Date and Time: The ending date and time of the Fuel Transactions to be included in the report. This defaults to the current date and time.

Search: To search for results based on selected volume and value.

State: The state of the transaction (e.g. Reserved, Cancelled, Cleared)

Authorised By: The terminal (client application) that started the transaction.

Limits: To show or hide money and volume limit columns in the results.

Delivery Fields: To add **Delivery Completed**, **Cleared By** and **Cleared At** columns to the results.

Type: The type of the transaction (i.e. Current, Stacked)

Grade: The grade of the transaction.

7.4 Delivery History

This screen shows a list of hose deliveries.

The filter fields at the top allow for specific results to be displayed in the page. To filter the results, select the options from the filter fields and press **Apply Filter** button to redisplay the filtered results.

Descriptions of the results column are:

Hose Delivery ID: The ID for the delivery.

Pump: The name of the pump where the fuel was delivered.

Grade: The name of the grade that was delivered.

Hose number: The number of the hose that was delivered.

Completed Time: The time and date that fueling ended.

Type: The type of delivery.

Volume: The quantity/volume of fuel delivered.

Value: The price of the fuel delivered.

Price: The unit price for the delivery.

Cleared by: The terminal that cleared (sold) the delivery.

Cleared at: The date and time the delivery was cleared (sold).

Volume meter totals: The electronic meter reading at the end of the delivery

Money meter totals: The electronic meter reading at the end of the delivery.

7.4.1 Delivery History Report filter

Listed below are the report filter options for delivery history.

Type: The type of delivery (i.e. Current, Stacked, Attendant, Postpay, etc.).

Pump: The pump where fuel was delivered.

Grade: The grade of the fuel delivered.

Start – Date and Time: The starting date and time of Hose Deliveries to be included in the report. This defaults to the timestamp of the oldest Hose Delivery available.

End – Date and Time: The ending date and time of Hose Deliveries to be included in the report. This usually defaults to the current date and time.

Search: Enter the volume or value to locate specific deliveries.

7.5 Events

This screen shows a list of system events.

The filter fields at the top allow for specific results to be displayed in the page. To filter the results, select the options from the filter fields and press **Apply Filter** button to redisplay the filtered results.

Level: To select the lowest event severity to be included in the report.

Device Type: To show only events for the selected device type.

After selecting a specific device type, filter options for event type will appear. For Tanks and Pumps a filter for specific devices will also appear:

> **Events:** To show only events for the selected event type (only available if you have selected a specific device type).

> **Pump/Tank:** To filter by specific pumps or tanks.

Date and Time: Use the Checkbox to show the Date and Time filter option – this determines the most recent events to show.

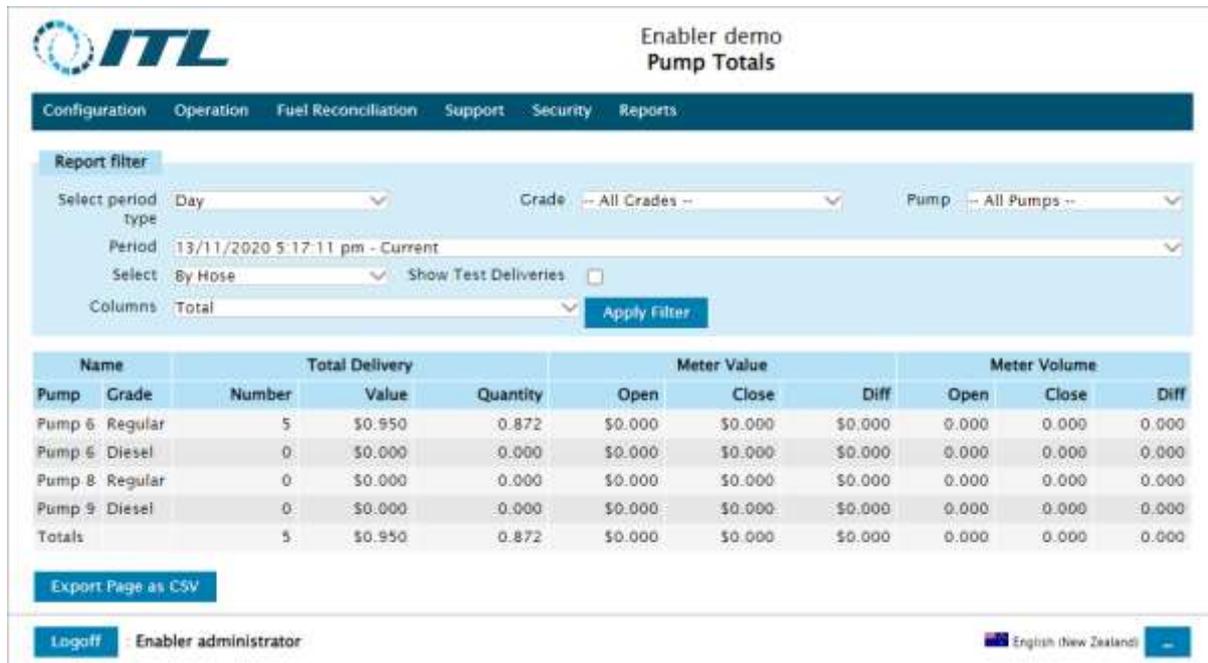**Search:** To search within descriptions for events.

The screenshot above shows an example of events report where the filter is set for: all events for Pump 1 Installed resulting in all the events for pump 1 installed in the system.

The first column has a symbol to indicate the level or severity of the event:

ⓘ Information only

⚠ Warning – Potential problem

❌ Error – Problem requiring user's attention

❌ Critical error – Critical or serious problem requiring immediate attention

7.6 Pump Totals

The Pump Totals report provides information about fuel sales.

The filter fields at the top allow for specific results to be displayed in the page. To filter the results, select the options from the filter fields and press **Apply Filter** button to redisplay the filtered results.

Select period type: To filter by the type of period: Shift, Day, Month or Year.

Grades: To filter by grades or select all grades.

Pump: To filter by pumps or select all pumps.

Period: To select the time period to be reported. The dropdown list shows the available report periods of the type chosen in the **Select** option.
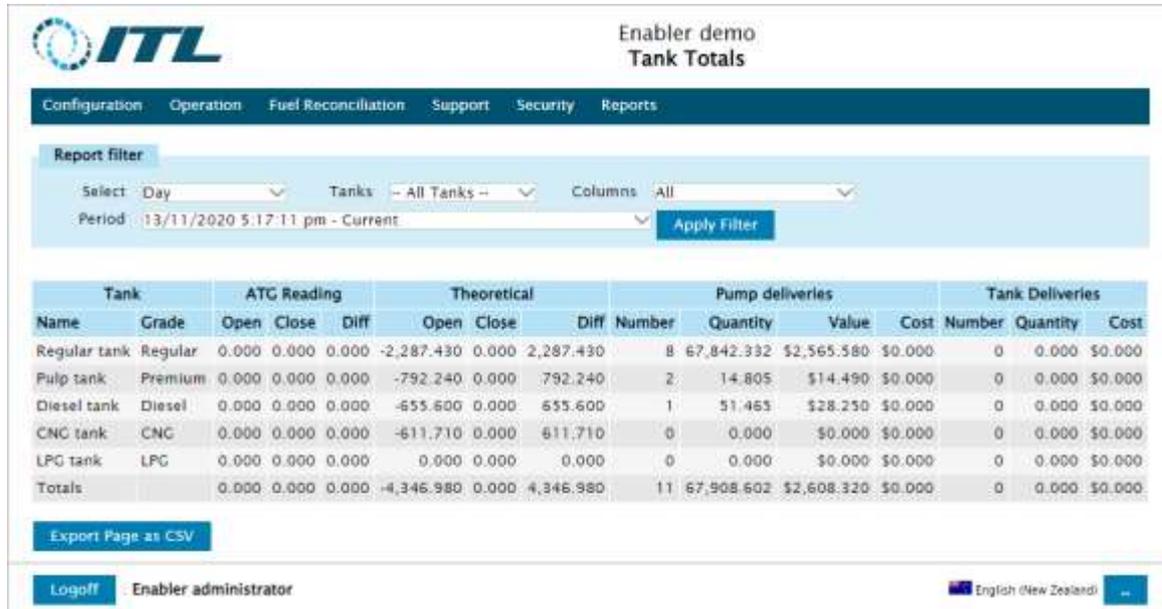
Select: To group results by hose, pump or grade.

Show Test Deliveries: To add test deliveries into the report.

Columns: To select views from these options: total deliveries and meters, deliveries, pump meters and all.

7.7 Tank Totals

The tank totals report shows totals including pump use, tanker deliveries, and tank gauge readings.

The filter fields at the top allow for specific results to be displayed in the page. To filter the results, select the options from the filter fields and press **Apply Filter** button to redisplay the filtered results.

Select: To select by the type of period: Shift, Day, Month or Year.

Period: To select the actual period to be reported by selecting start time/date and end time/date.

Tanks: To filter tank or select all tanks.

Columns: To select the data to include in the report: Gauges, Theoretical, Pump deliveries, Tank deliveries or All Columns.

7.8 Attendant Totals

The Attendant Totals report shows the attendants totals per period.

The filter fields at the top allow for specific results to be displayed in the page. To filter the results, select the options from the filter fields and press **Apply Filter** button to redisplay the filtered results.

Attendant: Select the Attendant which you want to show the totals for. The **Period** list automatically changes based on the Attendant selected.

Grade: The grade of the fuel delivered.

Pump: The pump where fuel was delivered.

Period: To select the time period to be reported. The drop-down list shows the available report periods for the attendant chosen in the **Attendant** option.