VERIDAPT

Monitor and Control Commodities with Certainty

Adapt**IQ**

User Guide
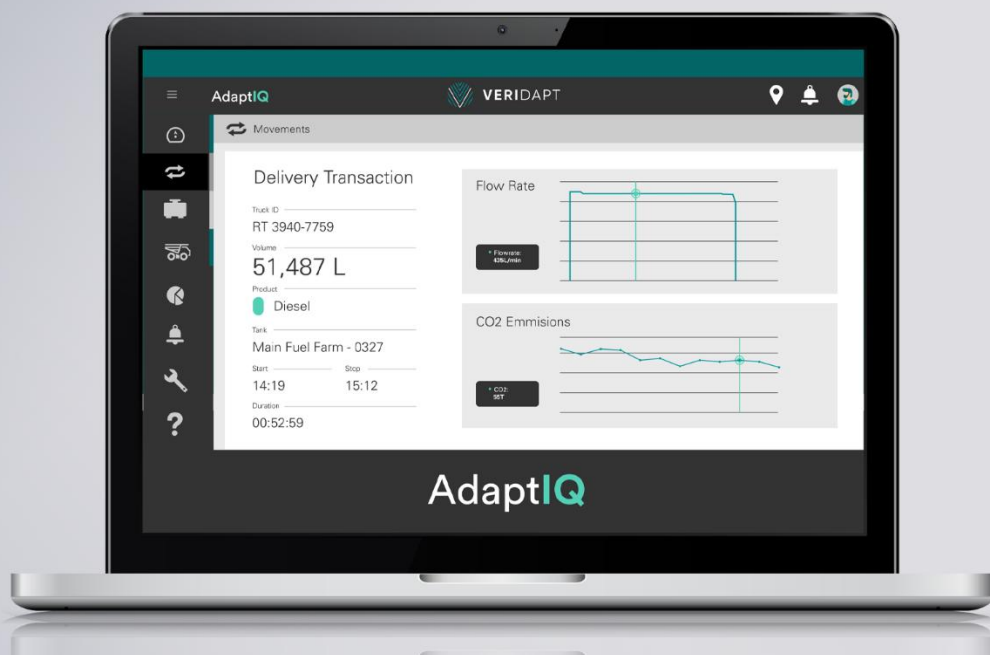
Confidentiality

Document History

UNCONTROLLED DOCUMENT WHEN PRINTED.
Printed copy expires one week from 24 March 2025.

Revision History

History of editing and release of this document:

Version	Date	Amendment	Author	Reviewer	Authorised
9.3.0	13 Dec 2024	Updated for Ver9.3.0 Release	V Richards	S Barnes	P Heywood
9.6.0	20 Feb 2025	Updated for Ver9.6.0 Release	V Richards	S Barnes	P Heywood

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2.   Dashboard

Revision History

Rev.	Description

2.1.   Overview
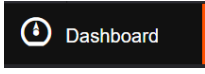
The Dashboard provides you with a site wide overview of storage levels and movement information. Once logged into AdaptIQ the Landing Site will be set by default in the Dashboard Page, dependent on your user permissions setting. The Dashboard Page offers a comprehensive overview of all important readings that may require immediate attention.

The page is divided into a number of panels, each provides important site metrics. The panels' data is dependent on which Tank Filter is selected.

You can select the Tank Filter using the Tank Filters drop down menu, which is the last drop-down menu (Left to Right) in the top navigation bar. For sites with more than one Tank Filter, the menu contains **All Tanks,** select this option to display the overall site metrics.
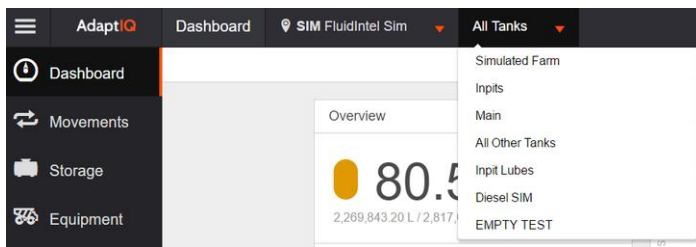
(Dashboard - Tank Filters Menu)

You can return to the Dashboard from anywhere in AdaptIQ by clicking the icon in the left navigation bar.
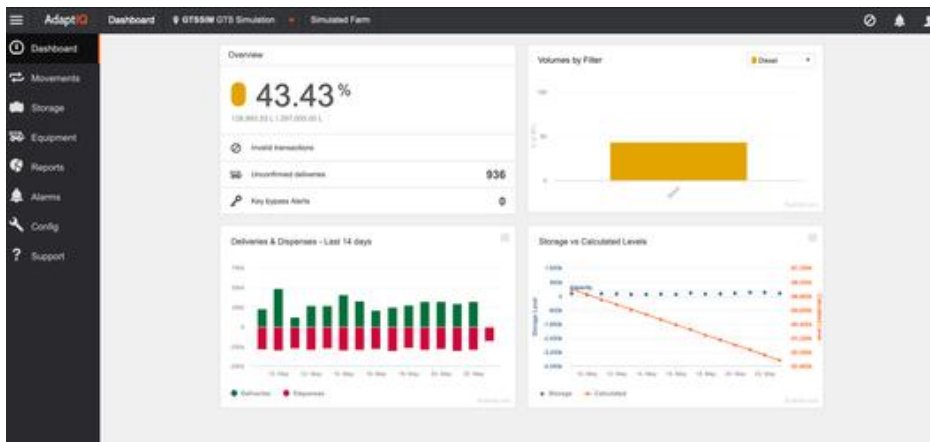
(*Full view of the Dashboard page*)

Overview Panel
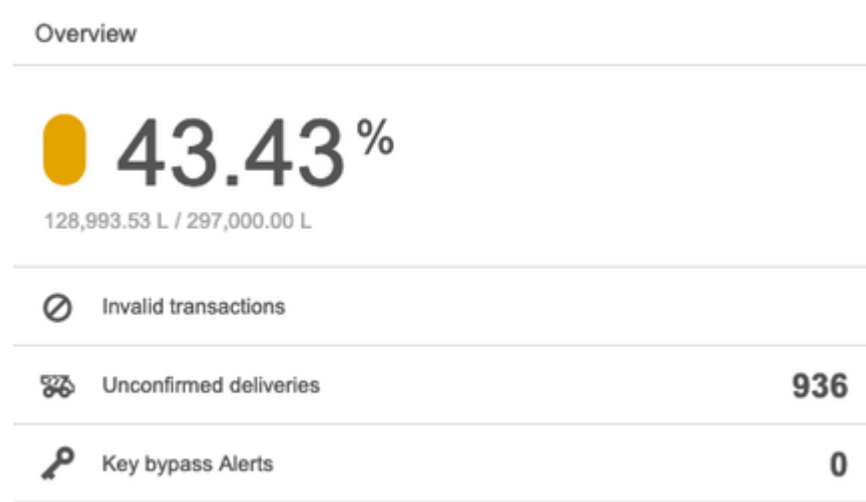
(*Dashboard - Overview Panel*)

This panel is located at the top left corner of the page. The Overview panel lists the following information:

Field	Description
Storage Level	The storage level of the main product (i.e. Diesel) in the selected Tank Filter. This is presented in two lines: The first line indicates the current level as a percentage of the total SFL (Safe Fill Level) of the selected Tank Filter, and the product is represented by its colour code. The second line indicates the current stored volume of the main product and the total SFL of the selected Tank Filter in litres.
Invalid Transactions	The current number of Invalid Transactions received from AdaptMAC/AdaptMCU connected to the selected Tank Filter.
Unconfirmed Deliveries	The current number of Unconfirmed Deliveries to the Tanks under the selected Tank Filter.
Key Bypass Alerts	The current number of AdaptMAC's or AdaptMCU's in Key Bypass Alarm mode, for those connected to the selected Tank Filter.

2.2. Volumes by Filter
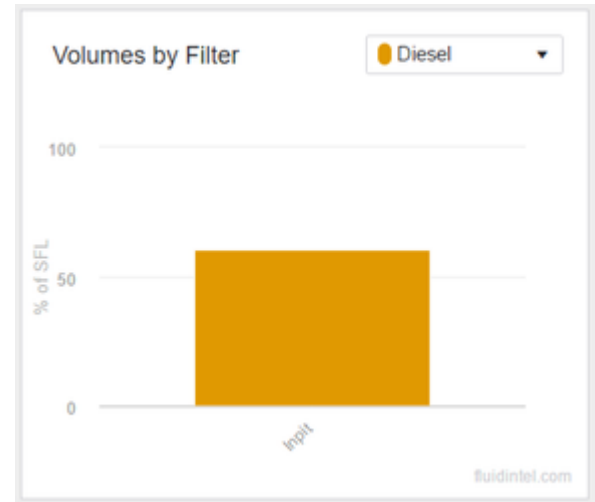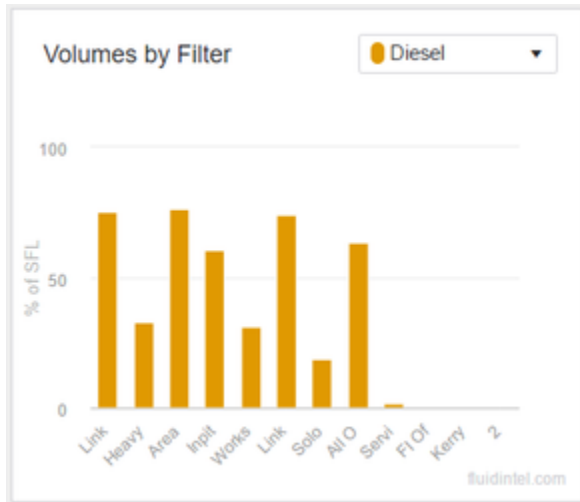
(Dashboard -Volumes by Filter Panel - All Tanks)

This panel is located at the top centre of the page.

The **Volumes by Filter Graph** presents a breakdown of product levels per tank filter in the form of a column chart. The horizontal axis represents the Tank Filters (One Filter, in case **All Tanks** is not selected), while the vertical axis represents the storage levels as percentage of the stored volume against the filter total SFL of each Tank Filter.

By default, the site's main product is displayed. In sites with multiple products, you can change between them through the drop down menu to the right in the Farm Volumes Panel.

2.2.1. Actions

- Hover you mouse over a specific bar to display the total storage in litres for this Tank Filter.
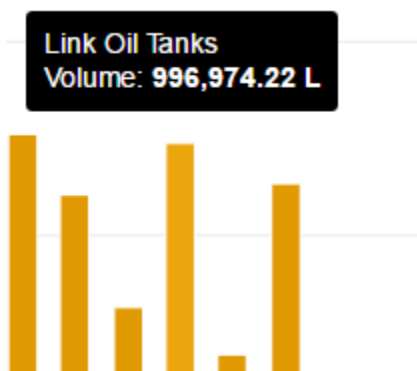
- Change the graph to represent another product by selecting the desired product from the drop down menu at the top right corner of this panel.
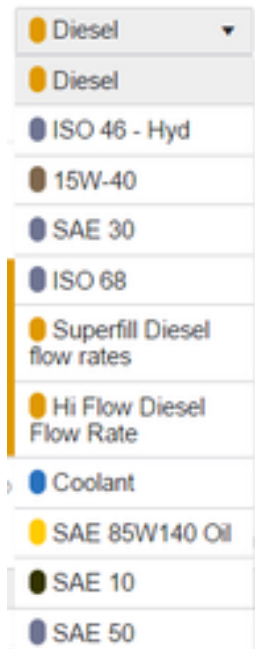
2.3. Deliveries & Dispenses Panel
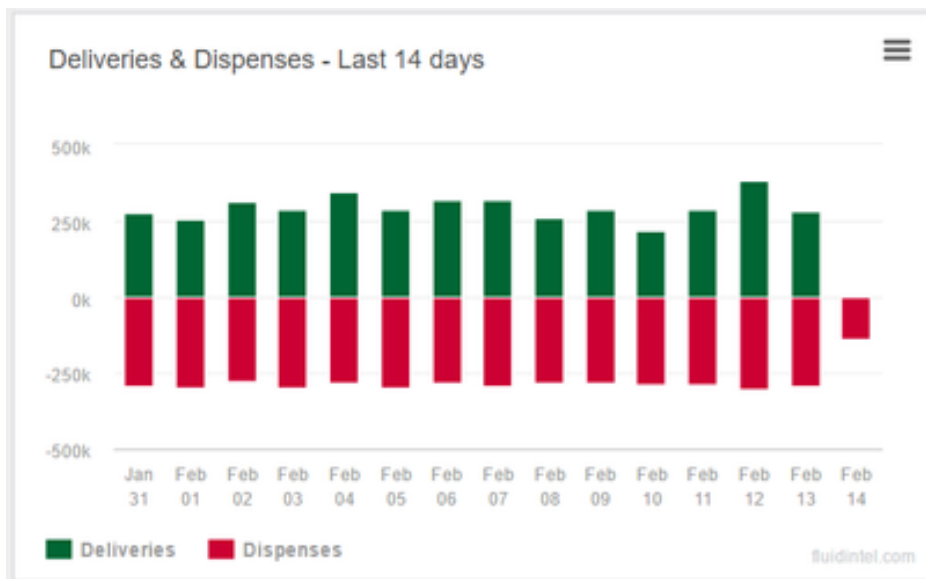
(Dashboard - *Deliveries & Dispenses Panel)*

This panel is located at the bottom left of the page.

This graph displays the amount of the main product that has been delivered and dispensed across the selected Tank Filter for the last 14 days, in the form of a column chart. The horizontal axis represents the date, while the vertical axis represents the aggregated volume in litres.

For each day, you can see a green bar (positive value), representing the aggregation of the volume for all confirmed deliveries, and a red bar (negative value), which represents the aggregation of the volume for all dispenses.

Unconfirmed Deliveries are not accounted for as deliveries in any of the graphs/reports.

2.3.1. Actions

- Hover you mouse over a specific bar to display more information about this sample.
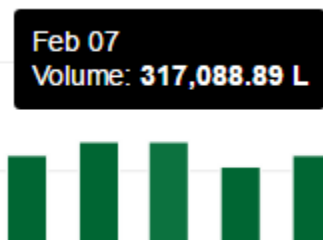
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
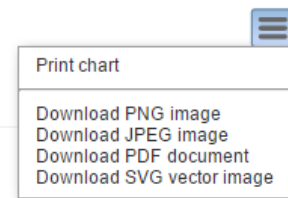
- Show/Hide the Deliveries or Dispenses graph by clicking its legend displayed below the chart.
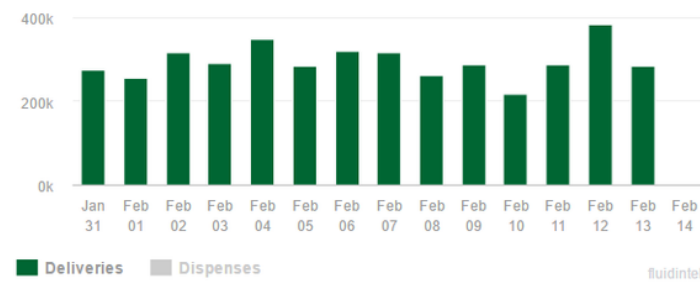
2.4.   Storage vs Calculated Levels
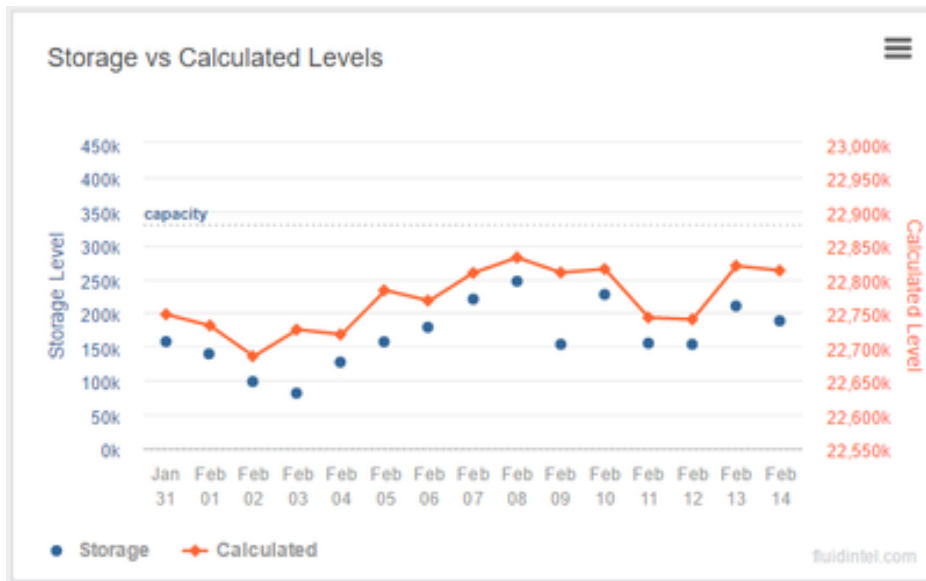
(Dashboard - Storage vs Calculated Levels)

This panel is located at the bottom right of the page

It displays the volume of the main product stored in the selected Tank Filter over the last 14 days, in the form of two line charts. The horizontal axis shows the date, while the vertical axis shows the volume in litres. One of the charts represents the measured storage levels, as recorded by Tank Gauges, Manual Dip ..etc in orange colour, while the other represents the calculated storage values derived from the In/Out transactions volumes in blue colour.

Substantial variations between both lines may indicate problems in the system, like miscalibrated meters, or leakage. If this is the case, it is important to find the problem and re-calibrate or repair.

2.4.1.   Actions

- Hover you mouse over a specific point to display more information about this sample.

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action

Print chart

Download PNG image
Download JPEG image
Download PDF document
Download SVG vector image
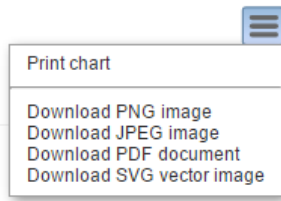
- Show/Hide one of the graphs by clicking its legend displayed below the chart.
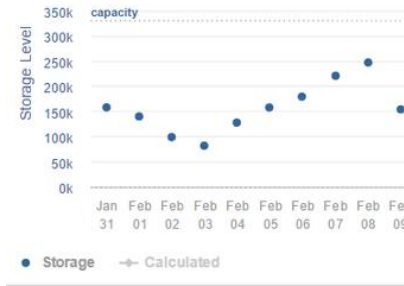
3. Movements

Revision History

Rev.	Description

3.1. Overview

The **Movements** section is the core of AdaptIQ application, it's where fuel movements can be tracked. A movement can be either a delivery, a dispense or a transfer and it is always bound to a particular site. Deliveries help to track input of fuel into tanks; dispenses record consumption of fuel by equipment; and transfers keep track of movement of fuel from one tank to another. In addition, this section provides access to two newly introduced features: Supervisor Override Challenges, and Delivery Dockets.

To access this section, click on the [Movements] icon from the left navigation bar.

(*Full view of the Movements page*)

3.2. Actions

There are a number of global actions associated with this section as follows:

3.2.1. Import/export/export selected

This is a powerful tool for integration, it's used to exchange the movements information between AdaptIQ, and other systems using a csv (comma separated values) file.

- Use ⬆ import to add a batch of movements from a CSV file; choose the file, and click on upload.

- Use ⬆ export to download the list (Deliveries, Dispenses, or Transfers) into a CSV file. The default fields will be exported.
- Use ⬆ export current columns to download the displayed list (Deliveries, Dispenses, or Transfers) into a CSV file. Only the selected columns for this list will be exported. Please see **Selected Columns** below.

Import processing will stop on any error, but any records that were successfully processed will be committed to the database. Therefore, should you have any errors it is best practice to ensure that following imports have already imported rows removed. There are checks to ensure that duplicates are removed but it can lead to many errors for the user to keep track of.

V9.3.0 ## Updated Movement CSV download prompt & example file

The example CSV's for the movement importer have been updated to provide guidance on how to best format the data

Additionally, the content on the importer has been updated and conditionally provides additional information when a site (or installation) has Direct to Equipment features enabled.

3.2.2. Select Columns

You can use this feature to add a custom look to the list of Movements. To select the columns to be displayed:

- Click on **.il select columns** in the actions section at the top right of the page, this will open the **Select Columns** dialog box;
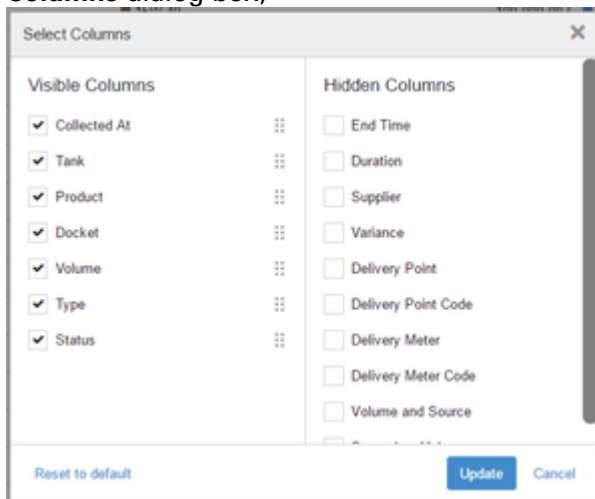
- The visible columns are displayed to the left, while the Hidden Columns are displayed to the right;
- Unselect a visible column to add it to the hidden columns, or select a hidden column to add it to the visible columns.
- Click on **reset to default** link to reset your selection to the system default.
- Click **Update** to confirm your selection, or **Cancel** to return back.

The set of columns change as you Navigate among the main Movements pages (Deliveries, Dispenses, and Transfers). Accordingly, you need to use **Select Columns** features on each page.

3.2.3. Filters

Click on **▼ filters** to show/hide the filters.

3.2.4. Navigate Pages

- Use the Navigation tab at the top left of this section to switch between the Movements pages.

| Deliveries | Transfers | **Dispenses** | Reconciliations | ··· |
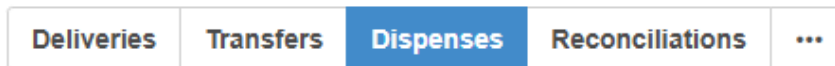
- Use the ··· button to view the full list of pages

| Deliveries | Transfers | **Dispenses** | Reconciliations | ··· |

Supervisor Override Challenges

3.3. Transaction Types

A movement enters the system with a number of types. Here is a complete list of these types.

Type	Description
Auto	Where a flow meter is used to detect, and measure the delivery volume. AdaptMAC/AdaptMCU constantly polls the flow meter to determine when a transaction starts and stops. It automatically creates a transaction when a flow above a given threshold is detected.
Manual	Entered manually at the delivery/dispense point via AdaptMAC or AdaptMCU.
Web Manual	A manually created transaction in AdaptIQ, used when no data related to the transaction has been captured by an AdaptMAC or AdaptMCU. Most often this is used on sites that do not have transaction monitoring instrumentation such as flow meters but still wish to manually reconcile the stock levels in their tanks.
Key Bypass	A transaction where AdaptMAC/AdaptMCU are in key bypass mode (totally disabled)
Error	An ignored transaction because a processing error occurred.
Unauthorised	A detected transaction (meter sensed) outside of operator's control. Flow occurred without authorisation from the AdaptMAC.
Gauged	A delivery created by the Gauged Transaction Service GTS. Refer to GTS - Gauged Transaction Service page for more details.
Reconciliation	A delivery created by the Reconciliation Adjustments Service RAS. Refer to RAS - Reconciliation Adjustment Service page for more details.

Sup Override	A transaction created while Supervisor Override feature is used from AdaptMAC, or Supervisor Override Challenge is used between both AdaptMAC and AdaptIQ. Both features are used to enable a transaction where no authorised tag is detected.
Manual Dip	Legacy Type. No more in use.
Spillage	Legacy Type. No more in use.
Gauged Spillage	Legacy Type. No more in use.
Reversal	A reversal dispense, used where the product is drained out of the Equipment Item back to the Tank.
Other	For any other types of transactions

3.4. Volume Data

A movement enters the system with a number of volume values sensed by instrumentation or entered by operators.

Field	Description
Metered Volume	This is the volume at ambient temperature returned from a flowmeter.
Temp. Comp. Metered Volume	This the volume compensated to 15 degrees Celsius (when a sensor is installed to measure product temperature).
Gauged Volume	A volume estimated from the difference in volume as reported by level probes (gauges) in a tank. This figure has a larger error margin when compared to flowmeters, as other concurrent movements may affect the gauged volume. The system has capability to compensate for concurrent movements but the number of variables make this a less accurate volume measurement method.
Temp. Comp. Gauged Volume*	As above, but compensated to 15 degrees Celsius. Temperature readings are available from the instrumentation installed.
Volume**	This is the canonical volume that will be used by AdaptIQ for reconciliation and reporting.

Footnotes

*Temperature compensation: the volume of a fluid can vary with temperature (as it expands and contracts) i.e. a litre of diesel is heavier at 5˚C than at 25˚C, where the temperature is recorded, volumes can be adjusted to represent the volume of diesel at a standard temperature (in this case, 15˚C). AdaptIQ always reports ambient volumes, and sometimes temperature compensated volumes for a transaction depending on the field instrumentation installed.

**The Volume recorded: from a transaction can be derived from several sources, and there may be more than one volume for a given transaction. All of these volumes are stored in the database and are shown on the view transaction page.

4. Dispenses

Revision History

Rev. v9.1.0	Description

4.1. Overview

Dispenses form the majority of movement transactions in AdaptFMS. It is at this point that the fuel or lubricants are dispensed to the plant or equipment that will ultimately consume them. From a stock reconciliation perspective, a dispense is the point that the product is considered consumed. Controlling dispenses is a critical component of AdaptFMS and is important to limit misuse of fuel and lubricants. Tracking these movements also assists in calculating burn rates, assigning costs to production activities and monitoring the lubricant top up and replacement history of plant and equipment for maintenance. By implementing a monitoring system through AdaptFMS you are taking a step to having complete control over any consumables that otherwise can cost a company unnecessary loss.

Notes for additions introduced in update 9.0.0

AdaptMobile - Managing Diesel Service Truck Dispensing

The AdaptMobile - Diesel Service Truck Management workflow is designed to monitor fuel dispenses where Veridapt hardware hasn't been installed on a truck. It enables the user to capture photos of paperwork, equipment or flowmeters and perform data entry in the field which is then sent through to AdaptIQ for review.

Modelling Suppliers & Carriers

In the last release, the Supplier model was built out along with the introduction of Carriers.

In this release, permissions have been introduced so that for Suppliers and Carriers who perform Direct To Equipment dispenses through the AdaptMobile platform, their back office personnel are able to log into AdaptIQ and see only those deliveries and dispenses that relate to their business. For a Supplier, they can see all the movements that have been performed on their behalf by multiple Carriers.

Movement File Previews

To add to the file management functionality introduced in 8.12, this release includes the addition of file previews. Instead of having to download, users can now see a small on-page preview when they click on the file record. In the example below, this allows the user to easily verify the equipment that received the product.

For images or PDFs with text, a full page preview is also available

4.2.   Dispenses List View

The dispenses list shows any of the following columns, according to the user selection:

Collected At ▾	Equipment ID	Group	Category	Product ▴	Dispensing Point	Type ▴	Peak Flow Rate ▴	Average Flow Rate	Volume ▴	Product Cost	Equipment Make
20/02/2025 15:03	Code 56	Equipment Group 1 (Equipment Group 1)	Grader (Grader)	● Diesel	HVR - Bay 3	● Manual	531.00 L/min	453.69 L/min	294.90 L	$0.00	Vehical Make
20/02/2025 13:48	Code 170	Equipment Group 1 (Equipment Group 1)	Track Dozer (Track Dozer)	● Diesel	MINExpo	● Auto	589.00 L/min	458.24 L/min	840.10 L	$0.00	Vehical Make
20/02/2025 13:18	Code 19	Equipment Group 1 (Equipment Group 1)	Rear Dump Truck (Rear Dump Truck)	● Diesel	AdaptMAC 1	● Auto	454.00 L/min	405.48 L/min	3,460.10 L	$0.00	Vehical Make
20/02/2025 13:10	Code 25	Equipment Group 1 (Equipment Group 1)	Rear Dump Truck (Rear Dump Truck)	● Diesel	AdaptMAC 1	● Manual	461.00 L/min	398.88 L/min	2,353.40 L	$0.00	Vehical Make
20/02/2025 13:04	Code 17	Equipment Group 1 (Equipment Group 1)	Rear Dump Truck (Rear Dump Truck)	● Diesel	AdaptMAC 1	● Auto	461.00 L/min	445.87 L/min	1,932.10 L	$0.00	Vehical Make
20/02/2025 12:44	Code 18	Equipment Group 1 (Equipment Group 1)	Rear Dump Truck (Rear Dump Truck)	● Diesel	AdaptMAC 1	● Auto	447.00 L/min	359.13 L/min	2,519.90 L	$0.00	Vehical Make
20/02/2025 12:11	Code 12	Equipment Group 1 (Equipment Group 1)	Rear Dump Truck (Rear Dump Truck)	● Diesel	AdaptMAC 1	● Manual	485.00 L/min	367.88 L/min	2,581.30 L	$0.00	Vehical Make

(*Dispenses - close up of List View*)

4.2.1.   Headers

Header	Description
Collected At	The start date and time of this delivery in DD/MM/YYYY HH:MM format.
Equipment ID	Equipment item to which the product was dispensed. Click on the blue text link to view its details.
Product	The dispensed product. Listed with a colour code and a name.
Cost Center	Cost center of equipment item, if defined.
Dispensing Point	The dispensing point, i.e. AdaptMAC or AdaptMCU where the transaction was handled, according to its description field.
Type	The transaction type (e.g. web manual, auto, etc.)
Volume	Dispensed volume of product. This is the canonical volume that will be used by AdaptIQ for reconciliation and reporting.
End Time	The end date and time of this dispense in DD/MM/YYYY HH:MM format.
Duration	The duration of transaction. The difference between Collected At and End Time in HH:MM:SS format.
Source Tank	The Tank from which the product was dispensed. Follow blue link text to see the View Tank page of this tank.
Group	The Equipment Group, the Equipment Item belongs to.
Category	The Equipment Category, the Equipment Item belongs to.

Department	The Department, the Equipment Item belongs to.
Dispensing Point Code	AdaptMAC/AdaptMCU ID where the transaction was handled
Dispensing Point Meter	The meter attached to the dispensing point, and measured this dispense
Dispensing Meter Code	The dispensing meter ID
Field User	The Filed User who managed the dispense.
SMU	The SMU (Service Meter Unit) value polled from the Equipment Item during this dispense.
Peak Flow Rate	This is the highest flow rate detected by the meter during this transaction.
Average Flow Rate	This is the average flow rate as calculated by AdaptIQ, based on the recorded dispensed volume, and **Flow Duration.**
Flow Start Time	The flow start date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow End Time	The flow end date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow Duration	The duration of the flow. The difference between **Flow Start Time** and **Flow End Time** in HH:MM:SS format.
Equipment Make	The make or manufacturer of the equipment.
Equipment Model	The model of the equipment.

Flow Rates

Flow Rate values are sent by AdaptMAC runs V9.1 or higher.

4.2.2.   Filters

Filters

Total selected:

Date Range

Group

Equipment Item

Category

Department

Product

Cost Centre

Dispensing Point

Dispensing Meter

Tank

Zone

Types

(Dispenses - close up of Filter view)

(In order of appearance from top to bottom)

Filter Criteria	Description
Keyword Search	Generic field to search the dispenses where the other criteria are not relevant, or you want to limit the search result to a specific keyword
Date	Use this filter criterion to search by a previous time frame. You can choose from: day ago week ago month ago year ago

Date Range	Use this filter criterion to search by a specific start and end date and time. To apply this filter follow these steps: • Click on the small arrow to the right of **Date Range**, the selection section will be displayed. • Click on **From** Date or Time to open the calendar and pick up a start date, hour, and minute • Click on **To** Date or Time to open the calendar and pick up an end date, hour, and minute • Click on apply button, to apply the filter.
Group	Use this criterion to filter the dispenses by the Equipment Group. The drop down list contains the list of Equipment Groups.
Equipment item	Use this criterion to filter by equipment item.
Category	Use this criterion to filter the dispenses by the Equipment Category. The drop down list contains the list of Equipment Categories.
Department	Use this criterion to filter the dispenses by the Department. The drop down list contains the list of Departments.
Product	Use this criterion to filter the dispenses by Product. The drop down list contains the list of Products.
Cost Centre	Use this criterion to filter the dispenses by the Equipment Items Cost Centre. The drop down list contains the list of Cost Centres.
Dispensing Point	Use this criterion to filter the dispenses by the Dispensing Point, where the transaction was handled. The drop down list contains the list of Dispensing Points in this Site.
Dispensing Meter	Use this criterion to filter the dispenses by the Dispensing Meter, that measured the transaction volume. The drop down list contains the list of Dispensing Meters categorised by the Dispensing Point they are attached to.
Tank Filter	This criterion is repeated according to the number of Tank Filters on the site (i.e. for a site with three Tank Filters, three criteria in the filters panel are created) Click on the Tank Filter name to expand it to the list of Tanks under this Tank Filter. Choose one or more Tanks to apply this filter.
Zone	Use this criterion to filter the dispenses by the Zone where the dispense was handled. The drop down list contains the list of Zones, defined for this site.

Types	Use this criterion to filter the dispenses by the transaction type. Select one or more of these types: Auto Manual Manual Dip Spillage Sup Override Other Web Manual Key Bypass Error Unauthorised Gauged Spillage Reversal For more details about transaction types refer to the Movements page.

4.2.3. List Actions

The following action buttons are available in this section.

[New] [New Reversal]

(*Dispenses – Close up of List Actions*)

New

Use the [New] button to create a new dispense. More details in the Create/Update Dispense page.

New Reversal

Use the **New Reversal** button to create a new reversal dispense. More details in the Create/Update Dispense page.

4.3.   Dispense View Page

When clicking on a dispense row on the list page, you will be directed to the display page, shown below.

The View Page of a reversal transaction doesn't include all the sections listed below. It includes only Reversal Transaction, Web Entered Data, and Audit Trail sections.
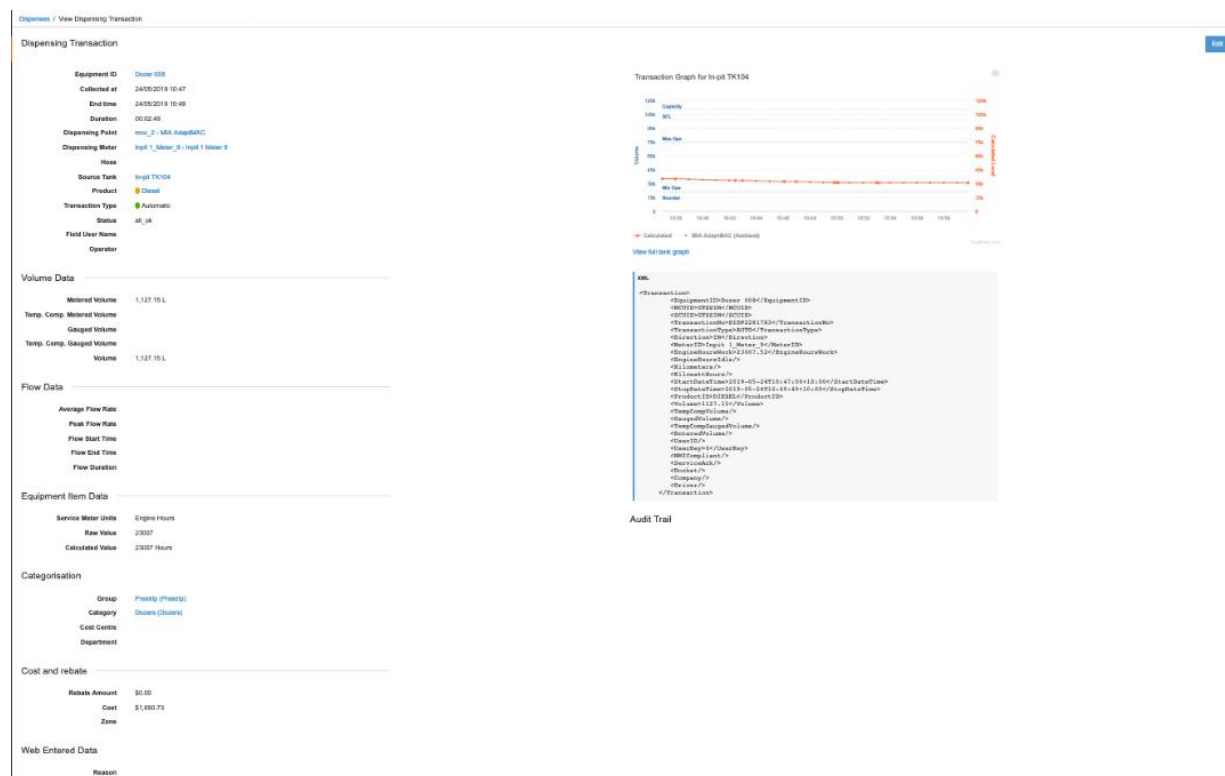
(*Dispensing Transaction - full view*)

The details view for Dispenses are organised in the following parts:

4.3.1.   Dispensing Transaction

Dispensing Transaction

Equipment ID	Invalid
Collected at	07/03/2017 11:14
End time	07/03/2017 11:25
Duration	00:11:19
Dispensing Point	TW001: Test wall MAC 1
Dispensing Meter	TW001_M1 - Test Wall Mac Dispensing Meter 1
Hose	
Source Tank	Tank 14-63
Product	ISO 46 - Hyd
Transaction Type	Key Bypass
Status	no_equip
Field User Name	
Operator	

(*Dispense View - Close up of Dispensing Transaction*)

Field	Description
Equipment ID	ID of the corresponding equipment. Follow the blue text link to see equipment details.
Collected at	The start date and time of this dispense in DD/MM/YYYY HH:MM format.
End time	The end date and time of this dispense in DD/MM/YYYY HH:MM format.
Duration	The duration of transaction. The difference between Collected At and End Time in HH:MM:SS format.
Dispensing Point	The dispensing point, i.e. AdaptMAC or AdaptMCU where the transaction was handled, according to its description field.
Dispensing Meter	Corresponding Meter for metered transactions, or N/A for others.
Hose	The hose from which the product was dispensed, if recorded by the field hardware.
Source Tank	Tank from which the dispense was made. Follow blue link text to see the View Tank page for this Tank.
Product	Corresponding product. Colour code and name.

Transaction Type	There dispense transaction type. One of the following: • Auto • Manual • Manual Dip • Spillage • Sup Override • Other • Web Manual • Key Bypass • Error • Unauthorised • Gauged Spillage • Reversal For more details about transaction types refer to the Movements page.
Status	The following statuses are available for dispenses: • All Ok: dispense has been processed and all data is correct • No equip: if there is no equipment associated with the dispense
Field User Name	The field users' name who performed the dispense.
Operator	Extra description about the operator who is responsible for the dispense.

4.3.2.   Reversal Transaction

This section replaces **Dispensing Transaction** section in case the transaction is of kind **Reversal.**

Reversal Transaction

Reversal date	28/12/2016 09:33
Source Equipment	LV3048
Target Tank	1581 INPIT TANK
Product	● Diesel
Volume	88.00 L

(*Dispense View - Close up of Reversal Transaction*)

Field	Description

Reversal Date	The date and time of this dispense in DD/MM/YYYY HH:MM format.
Source Equipment	ID of the corresponding equipment. Follow the blue text link to see equipment details.
Target Tank	The Tank that received the product from the Equipment Item. Follow blue link text to see the View Tank page for this Tank.
Product	Corresponding product. Colour code and name.
Volume	This is the canonical volume that will be used by AdaptIQ for reconciliation and reporting.

4.3.3.   Volume Data

Volume Data

Metered Volume	12,817.00 L
Temp. Comp. Metered Volume	0.00 L
Gauged Volume	
Temp. Comp. Gauged Volume	
Volume	12,817.00 L

(*Dispense View - Close up of Volume Data*)

A movement enters the system with a number of volume values sensed by instrumentation or entered by operators.

Field	Description
Metered Volume	This is the volume at ambient temperature returned from a flowmeter.
Temp. Comp. Metered Volume	This the volume compensated to 15 degrees Celsius (when a sensor is installed to measure product temperature).

Gauged Volume	A volume estimated from the difference in volume as reported by level probes (gauges) in a tank. This figure has a larger error margin when compared to flowmeters, as other concurrent movements may affect the gauged volume. The system has capability to compensate for concurrent movements but the number of variables make this a less accurate volume measurement method.
Temp. Comp. Gauged Volume*	As above, but compensated to 15 degrees Celsius. Temperature readings are available from the instrumentation installed.
Volume**	This is the transaction volume that will be used by AdaptIQ for reconciliation and reporting. This volume is selected according to AdaptIQ settings.

Footnotes

*Temperature compensation: the volume of a fluid can vary with temperature (as it expands and contracts) i.e. a litre of diesel is heavier at 5˚C than at 25˚C, where the temperature is recorded, volumes can be adjusted to represent the volume of diesel at a standard temperature (in this case, 15˚C). AdaptIQ always reports ambient volumes, and sometimes temperature compensated volumes for a transaction depending on the field instrumentation installed.

**The Volume recorded: from a transaction can be derived from several sources, and there may be more than one volume for a given transaction. All of these volumes are stored in the database and are shown on the view transaction page.

4.3.4. Flow Data

Flow Data

Average Flow Rate	1,132.58 L/min
Peak Flow Rate	2,000.00 L/min
Flow Start Time	07/03/2017 11:14
Flow End Time	07/03/2017 11:25
Flow Duration	00:11:19

(*Dispense View - Close up of Flow Data*)

This shows the flow values if detected by the flow meter (requires AdaptMAC V9.1 or above)

Field	Description

Average Flow Rate	This is the average flow rate as calculated by AdaptIQ, based on the recorded dispensed volume, and **Flow Duration,** in L/min.
Peak Flow Rate	This is the highest flow rate detected by the meter during this transaction in L/min.
Flow Start Time	The flow start date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow End Time	The flow end date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow Duration	The duration of the flow. The difference between **Flow Start Time** and **Flow End Time** in HH:MM:SS format.

4.3.5. Equipment Item Data

Equipment Item Data

Service Meter Units	Engine Hours
Raw Value	11052
Calculated Value	11052 Hrs

(*Dispense View - Close up of Equipment Item Data*)

SMU values current at the time of dispense, if available, are displayed in this section. It also includes other ancillary data related to taxes and accounting.

Field	Description
Service Meter Units	Can be one of the following: • Engine Hours (work): total working hours • Engine Hours (idle): total idle hours. These are not automatically captured • Kms: odometer value • kWh: kilowatt hours reading
Raw Value	The value entered dependent on what SMU value is selected.
Calculated Value	The calculated value dependent on what SMU value is selected.

4.3.6. Categorisation

Categorisation

Group	LIGHT VEHICLES (LIGHT VEHICLES)
Category	Toyota (Toyota)
Cost Centre	Warehouse Light Vehicles (13112445)
Department	

(Dispense View - Close up of Categorisation)

Field	Description
Group	The Group this equipment item belongs to.
Category	The Category this equipment item belongs to.
Cost Centre	Cost Centre applied to dispense, from the corresponding equipment item.
Department	The Department this equipment item belongs to.

4.3.7. Cost and Rebate

Cost and rebate

Rebate Amount	
Cost	
Zone	MINING

(Dispense View - Close up of Cost and Rebate)

Field	Description

Rebate amount	The rebate amount that was calculated at the time of processing, according to the Rebate Level of this Equipment Item. In order to have a non-zero value in this field, the Equipment item at the time of this transaction has to be: • Fuel Tax Rebate Eligible: Yes; • Rebate Level: set to one of the predefined Rebate Levels in Adapt IQ.
Cost	The cost of fuel, as defined at the site level when setting up Products and at the time the dispense was entered into AdaptIQ.
Zone	Zone applied to the dispense. Note this is a legacy field, and no more in use.

4.3.8. Web Entered Data

If the data is entered from AdaptIQ, the information below is important to note for tracking purposes.

Web Entered Data

Reason	
Performed By	
Last Modified By	N/A
Last Modified At	02/03/2016 09:50

(*Dispense View - Close up of Web Entered Data*)

Field	Description
Reason	Free text that a user can enter to describe or annotate a movement.
Performed by	User who initially entered this record.
Last modified by	Last user that modified this record.
Last modified at	Date and time of last change in DD/MM/YYYY HH:MM format.

4.3.9. Transaction graph

This section shows the graph of the tank zoomed to the time at which the transaction took place. For more information on the tank graph and its operation, see the Tank Graph page.

4.3.10. XML

For tracking purposes, when the dispense has been sent by AdaptMAC, the corresponding XML message payload is also displayed.

```
XML

<Transaction>
        <EquipmentID>Light Vehicles 008</EquipmentID>
        <MCUID>DEMOSIM</MCUID>
        <SCUID>DEMOSIM</SCUID>
        <TransactionNo>DISP687499</TransactionNo>
        <TransactionType>AUTO</TransactionType>
        <Direction>IN</Direction>
        <MeterID>In-Pit Refueller_Meter_13</MeterID>
        <EngineHoursWork>4040.53</EngineHoursWork>
        <EngineHoursIdle/>
        <Kilometers/>
        <KilowattHours/>
        <StartDateTime>2016-03-02T09:49:00+11:00</StartDateTime>
        <StopDateTime>2016-03-02T09:49:13+11:00</StopDateTime>
        <ProductID>DIESEL</ProductID>
        <Volume>96.71</Volume>
        <TempCompVolume/>
        <GaugedVolume/>
        <TempCompGaugedVolume/>
        <EnteredVolume/>
        <UserID/>
        <UserKey>0</UserKey>
        <NMICompliant/>
        <ServiceAck/>
        <Docket/>
        <Company/>
        <Driver/>
    </Transaction>
```

(*Dispense View - Close up of XML view*)

4.3.11. *Audit Trail*

Lists all the changes for a specific dispense

Audit Trail

🕐 26/07/2016 15:32   User: rob.cornish

Changed Collected at: from '26/07/2016 15:30' to '24/07/2016 15:30'

Changed End time: from '26/07/2016 15:30' to '24/07/2016 15:30'

Changed Volume: from '50,000.00 L' to '500,000.00 L'

4.3.12.

(*Dispense View - Close up of Audit Trail)*

4.4. **Timezone support for movements**

Timezones are now supported for Direct To Equipment movements. When the user selects a DTE Location, the time of that transaction is interpreted according to the selection

Deliveries / New Direct Delivery To Equipment

Direct Delivery to Equipment

Location *   Saskatoon

All times are interpreted as in Saskatchewan

Collected at *   05/08/2024 00:00

Timezones can be configured in AdaptIO config for locations

Comment

Config / Locations / Edit Location

USER MANAGEMENT

Application Users

Field users

Groups

Roles

EQUIPMENT

Departments

Equipment categories

Equipment groups

Cost centres

Rebate levels

Zones

Location details

Code *   SAS

Description *   Saskatoon (FT)

ERP Reference   1200

Time Zone   (GMT-06:00) Saskatchewan

Notes

System time zone - (GMT-05:00) America/Montreal
(GMT-08:00) Pacific Time (US & Canada)
(GMT-07:00) Mountain Time (US & Canada)
(GMT-06:00) Central Time (US & Canada)
(GMT-06:00) Saskatchewan
(GMT-05:00) Eastern Time (US & Canada)
(GMT-04:00) Atlantic Time (Canada)

☑ Enabled?

Update   Cancel

www.veridapt.com

5.

5.   Deliveries

Revision History
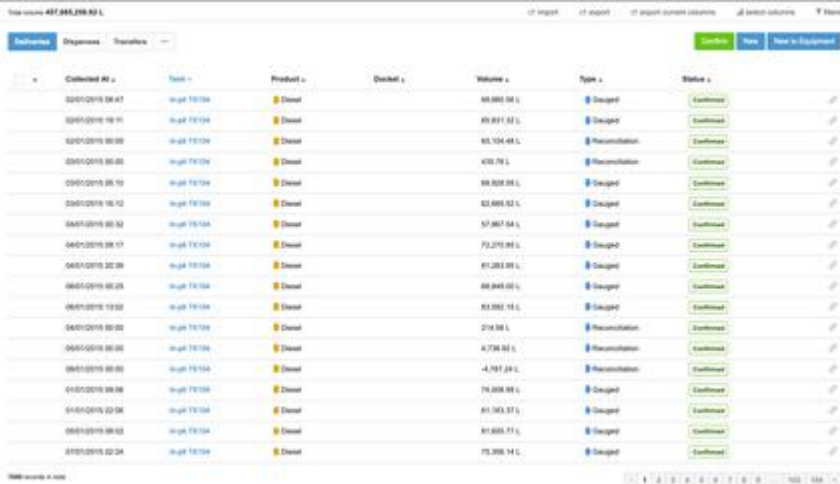
Rev.	Description

5.1.   Overview

Deliveries, in AdaptIQ, consists of movements of fuel from an external source into the site. The external source is most commonly from the fuel or lubricant supplier or distributor into storage tanks. This is the point at which AdaptFMS starts tracking and controlling access of the fuel or lubricant. Accurate and complete delivery records are a critical component of effective stock reconciliation.

5.2.   Deliveries List View

The deliveries list shows any of the following columns, according to the user selection:

(*Deliveries - close up of List View*)

5.2.1.   Headers

Header	Description
Selection check box	Enables you to select specific records. Check the check box on the header to select all displayed records.
Collected At	The start date and time of this delivery in DD/MM/YYYY HH:MM format.
Tank	The tank to which the product was delivered. Click on the blue text which indicates the tank to open the View Tank page of this Tank.

Product	The delivered product. Listed with a colour code and a name. One of items of the Products list for this site.
Docket	The docket number, as entered for this transaction via the AdaptMAC at the delivery point or via AdaptIQ for transactions entered using the web interface.
Volume	This is the canonical volume that will be used by AdaptIQ for reconciliation and reporting.
Type	The transaction type (e.g. web manual, auto, etc.)
Status	The status of the transaction, one of the following: Confirmed: for confirmed deliveries; Unconfirmed: for unconfirmed deliveries.
Variance	The discrepancy between Primary or Secondary Volume, and the Docketed Volume. The value is displayed as the number in litres and a percentage of the Docketed Volume (e.g. ▲ 140.14 L (0.16 %)) Green upward arrow, and green percentage show positive discrepancy, while red downward arrow, and red percentage show negative discrepancy. Docketed Volume is either primary or secondary volume in all cases.
Flow Duration	The duration of the flow. The difference between **Flow Start Time** and **Flow End Time** in HH:MM:SS format.
Flow Start Time	The flow start date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow End Time	The flow end date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Average Flow Rate	This is the average flow rate as calculated by AdaptIQ, based on the recorded delivered volume, and **Flow Duration,** in L/min.
Peak Flow Rate	This is the highest flow rate detected by the meter during this transaction in L/min
End Time	The end date and time of this delivery in DD/MM/YYYY HH:MM format.
Duration	The duration of transaction. The difference between **Collected At** and **End Time** in HH:MM:SS format.
Supplier	The supplier of the product. One of the suppliers in the Suppliers list.
Delivery Point	The AdaptMAC/AdaptMCU which received this delivery as per its description field.
Delivery Point Code	The ID of the AdaptMAC/AdaptMCU which received this delivery.
Delivery Meter	The meter which measured this delivery as per its description field. One of the meters attached to the delivery point.

Delivery Meter Code	The meter ID.
Volume and Source	The recorded primary volume in litres and its source (i.e. Docket)
Secondary Volume	The secondary volume recorded for this delivery, if any.
Maximum contamination	The maximum contamination of the product observed during the transaction
Average contamination	The average contamination of the product observed during the transaction
Fuel quality	This field indicates whether the product quality is correct (ok) or not, i.e. whether the average contamination is within the standards defined for this product.
Confirmed by	The user who confirmed this transaction by indicating that the recorded value is correct.
Field user	The field user who made the delivery

- Normal deliveries typically only take a very short time. However, in some cases the system merge two deliveries into one delivery to cover some situations. i.e. road train deliveries to account for the time it takes the driver to switch compartments and / or barrels. That is why some deliveries have a relatively long duration.
- The system merges deliveries according to **Delivery Events Merge Window** parameter of the Tank that received the delivery.

Flow Rates

Flow Rate values are sent by AdaptMAC runs V9.1 or higher.

5.2.2.   Filters

Filters

Total selected: 0

Search
Date
Date Range
Status
Tank
Product
Suppliers
Types

(Deliveries - close up of Filter view)

(In order of appearance from top to bottom)

Filter Criteria	Description
Keyword Search	Generic field to search the deliveries where the other criteria are not relevant, or you want to limit the search result to a specific keyword
Date	Use this filter criterion to search by a previous time frame. You can choose from: day ago week ago month ago year ago
Date Range	Use this filter criterion to search by a specific start and end date and time. To apply this filter follow these steps: • Click on the small arrow to the right of **Date Range**, the selection section will be displayed. • Click on **From** Date or Time to open the calendar and pick up a start date, hour, and minute • Click on **To** Date or Time to open the calendar and pick up an end date, hour, and minute • Click on apply button, to apply the filter.

Status	Use this criterion to filter by status : delivery unconfirmed or delivery confirmed.
Tank	This criterion is repeated according to the number of Tank Filters on the site (i.e. for a site with three Tank Filters, three criteria in the filters panel are created) Click on the Tank Filter name to expand it to the list of Tanks under this Tank Filter. Choose one or more Tanks to apply this filter.
Product	Use this criterion to filter by product?
Suppliers	Use this criterion to filter the deliveries by the product supplier. The drop down list contains the list of suppliers.
Type	Use this criterion to filter the deliveries by the transaction type. Select one or more of these types: Auto Manual Web Manual Key Bypass Error Unauthorised Gauged Reconciliation Sup Override For more details about transaction types refer to the Movements page.

5.2.3. List Actions

The following action buttons are available in this section.

Confirm **New** **New to Equipment**

(*Deliveries – Close up of List Actions*)

Confirm

Deliveries can be confirmed in three ways:

- Manually: each delivery needs to be manually confirmed via the web interface. Typically when a user compares the invoiced amount to the delivery volume recorded in AdaptIQ.
- By Variance: each tank that can be delivered to can have an option set to automatically confirm the delivery if the delivery is within a % of the docketed delivery volume.
- Automatically: every delivery will be automatically confirmed without user intervention

For more information on setting up the delivery confirmation settings for each tank see the Tanks page under the configuration section.

To confirm deliveries manually via the web interface:

- Select the deliveries you want to confirm using the check box next to each.
- Press **Confirm**

- An alternative way to manually confirm deliveries to the one explained above is to click on the transaction you want to confirm to open the view page of this transaction; and then press the **Confirm** button from the view page. This will allow you to review the transaction data before confirming it.
- If the **Confirm** button is not shown, then you do not have the required permissions to confirm deliveries. Check with your system administrator.
- Unconfirmed delivery transactions are excluded in subsequent AdaptIQ processes, like in the Reconciliation Adjustment service, reports and so on. It's important to periodically revise the deliveries and confirm them for accurate system calculations.

New
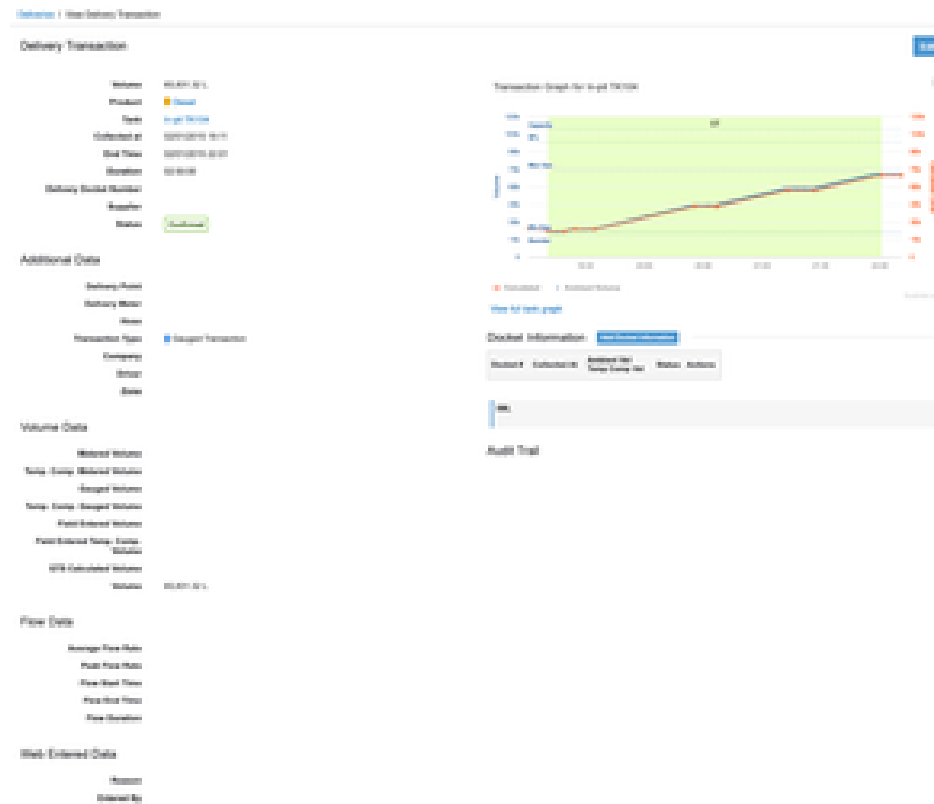
Use the **New** button to create a new delivery. More details in the Create/Update Delivery page.

New to Equipment

Use the **New to Equipment** button to create a new to equipment delivery. More details in the Create/Update Delivery page.

5.3. Delivery View Page

Click on a **delivery** row to open up the Delivery View page.

(Delivery View Page - full view)

The details view for Deliveries are organised in the following parts:

5.3.1.   Delivery Transaction

Delivery Transaction

Volume	1,000.00 L
Product	🔴 Diesel
Tank	HVO Virtual
Collected at	09/02/2017 10:18
End Time	09/02/2017 10:18
Duration	00:00:00
Delivery Docket Number	NN0001
Supplier	Shell
Status	Confirmed

(*Delivery View - Close up of Delivery Transaction*)

Field	Description
Volume	This is the canonical volume that will be used by AdaptIQ for reconciliation and reporting.
Product	Corresponding product.
Tank	This is the information on where the delivery went to. In most cases this displays the Tank description of the Tank that received the delivery. In some cases where the delivery went directly to an equipment item, this displays the "Direct to Equipment Location", one of the locations in the Direct to Equipment Locations list. Clicking on the tank name, which appears in blue, to open the View Tank page for that specific tank.
Collected at	The start date and time of this delivery in DD/MM/YYYY HH:MM format.
End time	The end date and time of this delivery in DD/MM/YYYY HH:MM format.
Duration	The duration of transaction. The difference between Collected At and End Time in HH:MM:SS format.
Delivery Docket Number	The number of the delivery docket if available.
Supplier	The supplier who supplied this particular transaction
Primary Volume	The primary volume in litres, and the source of this volume between brackets. Appears only if primary and secondary volumes have been recorded.

Secondary Volume	The secondary volume in litres, and the source of this volume between brackets. Appears only if primary and secondary volumes have been recorded.
Variance to Docket	The discrepancy between Primary or Secondary Volume, and the Docketed Volume. The value is displayed as the number in litres and a percentage of the Docketed Volume (e.g. ▲ 140.14 L (0.16 %)) Green upward arrow, and green percentage show positive discrepancy, while red downward arrow, and red percentage show negative discrepancy. Docketed Volume is either primary or secondary volume in all cases. Appears only if primary and secondary volumes have been recorded.
Variance Tolerance	The **Variance to Docket** percentage threshold at which the system auto-confirms the delivery. Any values over this threshold need manual confirmation. In order to use this feature, the Tank confirmation has to be set to "Variance". Please refer to the Tanks page for more details. Appears only if primary and secondary volumes have been recorded.
Status	The status of the transaction, one of the following: Confirmed: for confirmed deliveries; Unconfirmed: for unconfirmed deliveries.

5.3.2.   Additional Data

Additional Data

Delivery Point	
Delivery Meter	
Hose	
Transaction Type	● Gauged Transaction
Confirmation Time	09/02/2017 09:53
Company	
Driver	
Zone	

(*Delivery View - Close up of Additional Data*)

Field	Description
Delivery Point	The SCU responsible for this delivery in case of metered transactions, or N/A for others.
Delivery Meter	Corresponding Meter for metered transactions, or N/A for others.
Hose	The hose from which the product was delivered, if recorded by the field hardware.

Transaction Type	One of the following: Auto Manual Web Manual Key Bypass Error Unauthorised Gauged Reconciliation Sup Override Please refer to Transaction Types section in the Movements page for description.
Confirmation Time	The time where the delivery is confirmed.
Company	An optional field for the supplier's name.
Driver	An optional field for the Driver's name.
Zone	The zone associated with delivery. A legacy field, kept for backward compatibility.

5.3.3. Volume Data

Volume Data

Metered Volume	2,000.00 L
Temp. Comp. Metered Volume	
Gauged Volume	
Temp. Comp. Gauged Volume	
Field Entered Volume	2,000.00 L
Field Entered Temp. Comp. Volume	2,000.00 L
GTS Calculated Volume	
Volume	2,000.00 L

(*Delivery View - Close up of Volume Data*)

A movement enters the system with a number for volume values sensed by instrumentation or entered by operators.

Field	Description
Metered Volume	This is the volume at ambient temperature returned from a flowmeter.
Temp. Comp. Metered Volume	This the Metered Volume compensated to 15 degrees Celsius, when a sensor is installed to measure product temperature.
Gauged Volume	A volume estimated from the difference in volume as reported by the tank gauge if installed. This figure has a larger error margin when compared to flow meters, as other concurrent movements may affect the gauged volume. The system has capability to compensate for concurrent movements but the number of variables make this a less accurate volume measurement method.
Temp. Comp. Gauged Volume*	This the Gauged Volume compensated to 15 degrees Celsius, when a sensor is installed to measure product temperature.
Field Entered Volume	The docket volume that has been gathered at the delivery point via an AdaptMAC or AdaptMCU. This volume is manually entered by the delivery driver via the keypad/touchscreen. It can be used to check against the volume(s) captured by the instrumentation.
Field Entered Comp.Volume	This the Field Entered Volume (Docket) compensated to 15 degrees Celsius, when a sensor is installed to measure product temperature.
GTS Calculated Volume	The volume as been calculated by GTS (Gauged Transaction Service)

Volume**	This is the transaction volume that will be used by AdaptIQ for reconciliation and reporting. Usually this is the same as the primary volume, unless only one volume is recorded, or the value has been updated manually.

Footnotes

*Temperature compensation: the volume of a fluid can vary with temperature (as it expands and contracts) i.e. a litre of diesel is heavier at 5˚C than at 25˚C, where the temperature is recorded, volumes can be adjusted to represent the volume of diesel at a standard temperature (in this case, 15˚C). AdaptIQ always reports ambient volumes, and sometimes temperature compensated volumes for a transaction depending on the field instrumentation installed.

**The Volume recorded: from a transaction can be derived from several sources, and there may be more than one volume for a given transaction. All of these volumes are stored in the database and are shown on the view transaction page.

5.3.4. Flow Data

Flow Data

Average Flow Rate	33.33 L/min
Peak Flow Rate	330.00 L/min
Flow Start Time	13/02/2017 14:59
Flow End Time	13/02/2017 15:59
Flow Duration	01:00:00

(*Delivery View - Close up of Flow Data*)

This shows the flow values if detected by the flow meter (requires AdaptMAC V9.1 or above)

Field	Description
Average Flow Rate	This is the average flow rate as calculated by AdaptIQ, based on the recorded delivered volume, and **Flow Duration,** in L/min.
Peak Flow Rate	This is the highest flow rate detected by the meter during this transaction in L/min.
Flow Start Time	The flow start date and time as detected by the meter in DD/MM/YYYY HH:MM format.

| Flow End Time | The flow end date and time as detected by the meter in DD/MM/YYYY HH:MM format. |
| Flow Duration | The duration of the flow. The difference between **Flow Start Time** and **Flow End Time** in HH:MM:SS format. |

5.3.5. Web Entered Data

It is important to know where the data for the deliveries is coming from. If the data is entered from AdaptIQ, the information below is important to note for tracking purposes.

Web Entered Data

Reason	
Entered By	N/A
Last Modified By	N/A
Last Modified At	14/11/2016 06:47

(*Delivery View - Close up of Web Entered Data*)

Field	Description
Reason	Free, optional text that a user can enter to describe or annotate a movement.
Entered by	the user who initially entered this record into AdaptIQ.
Last modified by	Last user that modified this record in AdaptIQ.
Last modified at	Date time of last change. Transaction date in DD/MM/YYYY HH:MM format.

5.3.6. Transaction graph

This section shows the graph of the tank zoomed to the time at which the transaction took place. For more information on the tank graph and its operation, see the Tank Graph page.

5.3.7.

5.3.8. **Docket Information**

It exists only where a tank with GTS enabled is involved in the delivery transaction. Refer to Delivery Dockets page for more information. It displays the docket information linked to this delivery transaction.

(Delivery View - Close up of Docket Information)

In some deliveries where the Gauged Transaction couldn't be matched with Delivery Docket information received from AdaptMAC, the interface will display **Add Docket Information** button to allow manual entry.

Please refer to the Delivery Dockets page for more information on how to create a delivery docket.

(Delivery View - Close up of Docket Information - no matched Docket found)

5.3.9. **XML**

For tracking purposes, when the delivery has been sent by AdaptMAC, the corresponding XML message is also displayed.

```xml
XML

<Transaction>
        <EquipmentID/>
        <MCUID>SIM</MCUID>
        <SCUID>SIM</SCUID>
        <TransactionNo>DELI14015</TransactionNo>
        <TransactionType>AUTO</TransactionType>
        <Direction>IN</Direction>
        <MeterID>Inpit 1_Meter_2</MeterID>
        <EngineHoursWork/>
        <EngineHoursIdle/>
        <Kilometers/>
        <KilowattHours/>
        <StartDateTime>2016-11-14T18:05:00+11:00</StartDateTime>
        <StopDateTime>2016-11-14T21:01:21+11:00</StopDateTime>
        <ProductID>DIESEL</ProductID>
        <Volume>70297.63</Volume>
        <TempCompVolume/>
        <GaugedVolume/>
        <TempCompGaugedVolume/>
        <EnteredVolume/>
        <UserID/>
        <UserKey>0</UserKey>
        <NMICompliant/>
        <ServiceAck/>
        <Docket/>
        <Company/>
        <Driver/>
    </Transaction>
```

(Delivery View - Close up of XML view)

5.3.10.   Audit Trail

Lists all the changes for a specific delivery. Each row shows the changed fields, time of change, and the user who committed the changes.

Audit Trail

⊙ 08/02/2017 12:42   User: Demo.Admin
        Changed Volume: New
⊙ 08/02/2017 10:20   User: gil
        Added Related Entity: '66'
        Added Related Entity Type: 'DeliveryDocket'
        Changed Docket Number: New
        Removed Supplier: 'QA001'
        Added Entered Volume: '1000.0'
        Changed Volume: New
⊙ 08/02/2017 10:19   User: gil
        Changed Docket Number: New
⊙ 02/02/2017 11:36   User: rob.cornish
        Changed Status: New
        Added Confirmation time: '02/02/2017 11:36'

(Delivery View - Close up of Audit Trail)

5.3.11.   Direct to Equipment Dispenses

It exists where the product is delivered directly to equipment. It is always a Web-Manual type of delivery, and associated with one or more dispenses. See New to Equipment below for more details about how this transaction is created.

Direct to Equipment dispenses

Dispensing Time	Equipment Item	Volume	Actions
22/11/2016 14:23	LV1090	900.00 L	View
22/11/2016 14:22	997	800.00 L	View

(Close up of Direct to Equipment Dispenses)

V9.3.0

Direct to Equipment - Web Entry

Improvements to the web entry process for Direct to Equipment transactions:
- The product selector dropdown will now default the sites main product
- Removed child product options from the product selector dropdown
- If the site only has a single product configured users are no longer required to select the product.

6. Transfers

Revision History

Rev.	Description

6.1. Overview

Transfers, in AdaptIQ, consists of movements of fuel from an internal source to another internal source. This takes place when product is being moved from one storage tank to another storage tank or a storage tank to a service truck which has an AdaptMAC installed. Accurate and complete transfer records are a critical component for keeping track of where the product is at any given moment.

6.2. Transfers List View

The transfers list shows any of the following columns, according to the user selection:

(*Transfers - close up of List View*)

6.2.1. Headers

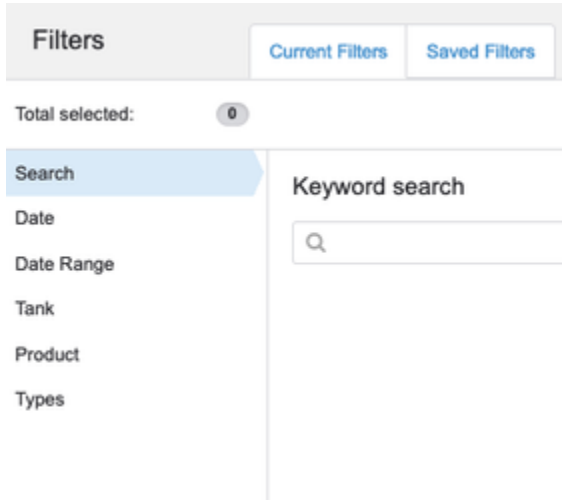| Header	Description
Collected At	The start date and time of this delivery in DD/MM/YYYY HH:MM format.
Source	The Tank from which the product was transferred. Click on the blue tank link to view its details.
Target	The Tank to which the product was transferred. Click on the blue tank link to view its details.
Product	The transferred product. Listed with a colour code and a name.

Type	The transaction type (e.g. web manual, auto, etc.)
Volume	The transferred volume in litres. This is the canonical volume that will be used by AdaptIQ for reconciliation and reporting.
End Time	The end date and time of this transfer in DD/MM/YYYY HH:MM format.
Duration	The duration of transaction. The difference between Collected At and End Time in HH:MM:SS format.
SMU	The AdaptSMU value recorded from service trucks when refilling the storage tanks.
Transfer Point	The AdaptMAC/AdaptMCU that handled the transfer, as per its description field
Transfer Point Code	The ID of AdaptMAC/AdaptMCU that handled the transfer.
Transfer Meter	The flow meter that measured the transfer, as per its description field.
Transfer Meter Code	The ID of the flow meter that measured the transfer.
Peak Flow Rate	This is the highest flow rate detected by the meter during this transaction.
Average Flow Rate	This is the average flow rate as calculated by AdaptIQ, based on the recorded transferred volume, and **Flow Duration.**
Flow Start Time	The flow start date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow End Time	The flow end date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow Duration	The duration of the flow. The difference between **Flow Start Time** and **Flow End Time** in HH:MM:SS format.
Maximum contamination	The maximum contamination of the product observed during the transaction.
Average contamination	The average contamination of the product observed during the transaction.
Fuel quality	This field indicates whether the product quality is correct (ok) or not, i.e. whether the average contamination is within the standards defined for this product.
Field user	If user authentication is enabled on AdaptMAC.

Flow Rates

Flow Rate values are sent by AdaptMAC runs V9.1 or higher.

6.2.2. Filters

(Transfers - close up of Filter view)

(In order of appearance from top to bottom)

Filter Criteria	Description
Keyword Search	Generic field to search the transfers where the other criteria are not relevant, or you want to limit the search result to a specific keyword
Date	Use this filter criterion to search by a previous time frame. You can choose from: day ago week ago month ago year ago

	Date Range	Use this filter criterion to search by a specific start and end date and time. To apply this filter follow these steps: • Click on the small arrow to the right of **Date Range**, the selection section will be displayed. • Click on **From** Date or Time to open the calendar and pick up a start date, hour, and minute • Click on **To** Date or Time to open the calendar and pick up an end date, hour, and minute • Click on apply button, to apply the filter.
	Tank	This criterion is repeated according to the number of Tank Filters on the site (i.e. for a site with three Tank Filters, three criteria in the filters panel are created) Click on the Tank Filter name to expand it to the list of Tanks under this Tank Filter. Choose one or more Tanks to apply this filter.
	Product	Use this criterion to filter by transferred product(s).

Types	Use this criterion to filter transfers by the transaction type. Select one or more of these types: Auto Manual Web Manual Key Bypass Error Unauthorised Sup Override For more details about transaction types refer to the Movements page.	

6.2.3.   **List Actions**

The **New** button is the only action button associated with this list

New

Use the **New** button to create a new transfer. More details in the Create/Update Transfer page.

This button is not available is you do not have enough permissions. Check with your system administrator.

6.3.   **Transfer View Page**

Click on a **transfer** row to open up the Transfer View page.
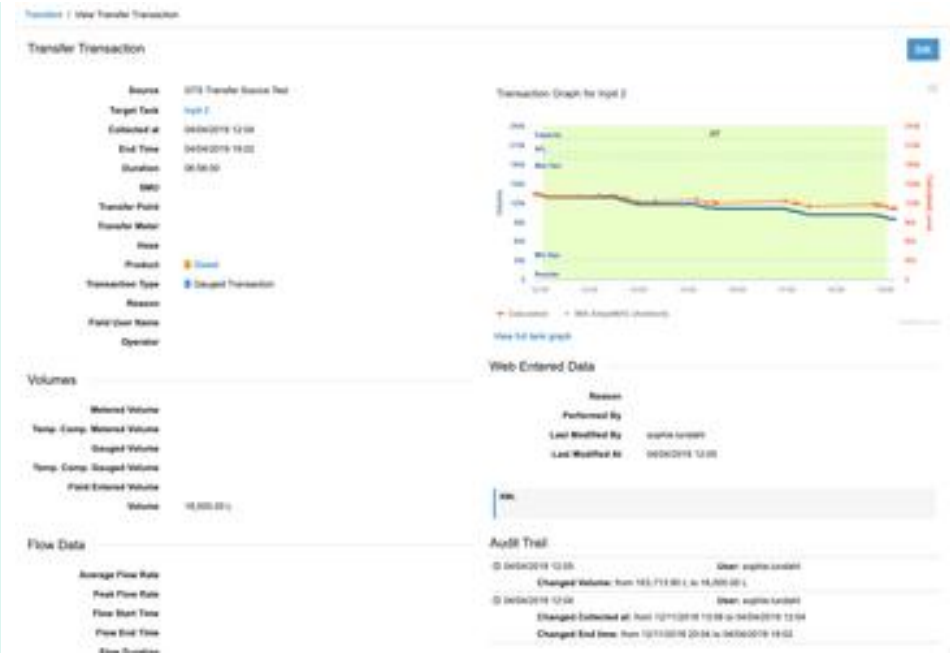
(Transfer View Page - *full view*)

The details view for Transfers are organised in the following parts:

6.3.1.　　Transfer Transaction

Transfer Transaction

Source	ZZZ 1580 Tank Description
Target Tank	1TNJ524
Collected at	21/02/2017 12:06
End Time	21/02/2017 12:07
Duration	00:01:18
SMU	TW001
Transfer Point	TW001: Test wall MAC 1
Transfer Meter	TW001_M1 - Test Wall Mac Dispensing Meter 1
Hose	
Product	ISO 46 - Hyd
Transaction Type	Automatic
Reason	
Field User Name	
Operator	1
Load Plan	TA7E5

(*Transfer View - Close up of Transfer Transaction*)

Field	Description
Source	The Tank from which the product was transferred. Click on the blue tank link to view its details.
Target Tank	The Tank to which the product was transferred. Click on the blue tank link to view its details.
Collected At	Start date and time of transaction in DD/MM/YYYY HH:MM format.
End Time	The end date and time of this transfer in DD/MM/YYYY HH:MM format.
Duration	The duration of transaction. The difference between Collected At and End Time in HH:MM:SS format.
SMU	The SMU (Service Meter Unit) value polled from the Equipment Item during this dispense. In case a Service Truck is a part of the Transfer.
Transfer Point	The transfer point, i.e. AdaptMAC or AdaptMCU where the transaction was handled, according to its description field.
Transfer Meter	Corresponding Meter for metered transactions, or N/A for others.
Hose	The hose from which the product was dispensed, if recorded by the field hardware.
Product	Corresponding product.

	One of the following:
Transaction Type	Auto
	Manual
	Web Manual
	Key Bypass
	Error
	Unauthorised
	Sup Override
	Please refer to Transaction Types section in the Movements page for description.
Reason	An optional field for the reason of transfer
Field User Name	An optional field for the field users' name who performed the transfer
Operator	Extra description about the operator who is responsible for the transfer.
Load Plan	Load Plan reference, if the transfer is a part of a load plan. Clicking the load plan reference will open the Load Plan View page

6.3.2.   Volumes

Volumes

Metered Volume	N/A
Temp. Comp. Metered Volume	N/A
Gauged Volume	N/A
Temp. Comp. Gauged Volume	N/A
Field Entered Volume	N/A
Volume	1,008.00 L
Peak Flow Rate	N/A

(*Transfer View - Close up of Volumes*)

A movement enters the system with a number of volume values sensed by instrumentation or entered by operators.

Field	Description
Metered Volume	This is the volume at ambient temperature returned from a flowmeter.
Temp. Comp. Metered Volume	This the volume compensated to 15 degrees Celsius (when a sensor is installed to measure product temperature).
Gauged Volume	A volume estimated from the difference in volume as reported by level probes (gauges) in a tank. This figure has a larger error margin when compared to flowmeters, as other concurrent movements may affect the gauged volume. The system has capability to compensate for concurrent movements but the number of variables make this a less accurate volume measurement method.
Temp. Comp. Gauged Volume*	As above, but compensated to 15 degrees Celsius. Temperature readings are available from the instrumentation installed.
Volume**	This is the transaction volume that will be used by AdaptIQ for reconciliation and reporting. This volume is selected according to AdaptIQ settings.

*Temperature compensation: the volume of a fluid can vary with temperature (as it expands and contracts) i.e. a litre of diesel is heavier at 5˚C than at 25˚C, where the temperature is recorded, volumes can be adjusted to represent the volume of diesel at a standard temperature (in this case, 15˚C). AdaptIQ always reports ambient volumes, and sometimes temperature compensated volumes for a transaction depending on the field instrumentation installed.

**The Volume recorded: from a transaction can be derived from several sources, and there may be more than one volume for a given transaction. All of these volumes are stored in the database and are shown on the view transaction page.

6.3.3. Flow Data

Flow Data

Average Flow Rate	5,006.15 L/min
Peak Flow Rate	2,000.00 L/min
Flow Start Time	21/02/2017 12:06
Flow End Time	21/02/2017 12:07
Flow Duration	00:01:18

(Transfer *View - Close up of Flow Data*)

This shows the flow values if detected by the flow meter (requires AdaptMAC V9.1 or above)

Field	Description
Average Flow Rate	This is the average flow rate as calculated by AdaptIQ, based on the recorded transferred volume, and **Flow Duration,** in L/min.
Peak Flow Rate	This is the highest flow rate detected by the meter during this transaction in L/min.
Flow Start Time	The flow start date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow End Time	The flow end date and time as detected by the meter in DD/MM/YYYY HH:MM format.
Flow Duration	The duration of the flow. The difference between **Flow Start Time** and **Flow End Time** in HH:MM:SS format.

6.3.4. Transaction graph

This section shows the graph of the tank zoomed to the time at which the transaction took place. For more information on the tank graph and its operation, see the Tank Graph page.

Transaction Graph for Inpit 2

View full tank graph
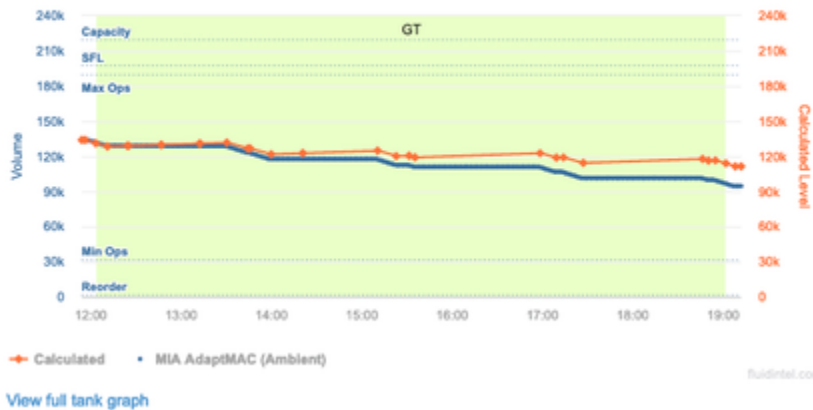
6.3.5. Web Entered Data

If the data is entered from AdaptIQ, the information below is important to note for tracking purposes.

Web Entered Data

Reason	
Performed By	
Last Modified By	N/A
Last Modified At	02/03/2016 09:50

(*Transfer View - Close up of Web Entered Data*)

Field	Description
Reason	Free text that a user can enter to describe or annotate a movement.
Performed by	User who initially entered this record.
Last modified by	Last user that modified this record.
Last modified at	Date and time of last change in DD/MM/YYYY HH:MM format.

XML

XML

(*Transfer View - Close up of XML view*)

For tracking purposes, when the transfer page has been sent by AdaptIQ or AdaptMAC, the corresponding XML message payload is displayed too.

6.3.6. Audit Trail

Lists all the changes for a specific transfer

Audit Trail

🕓 13/09/2016 15:51   **User:** Unknown

    Added Related Entity: '251'

    Added Related Entity Type: 'LoadPlan'

(*Transfer View - Close up of Audit Trail*)

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7.   Reconciliations

Revision History
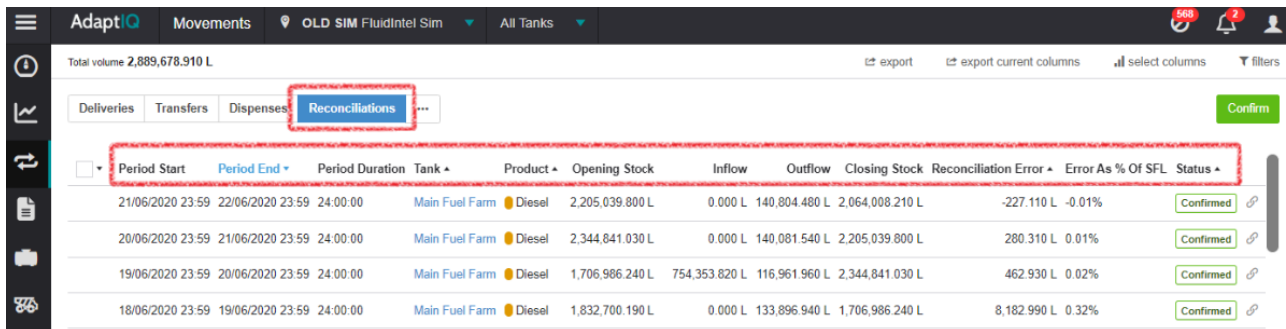
Rev. v9.0.0	Description

7.1.   Overview

Version **9.0.0** of **AdaptIQ** introduced an overhaul of **Reconciliation Movements**

We have made significant changes to the way reconciliations are displayed and calculated in AdaptIQ. Where previously they were treated as another delivery record, they now have their own list page with relevant fields similar to the reconciliation reports.

A "Reconciliation' tab has been added to the Movement List Pages. A number of new fields have been added to provide much more granularity of each reconciliation. As shown in the screenshot below, there are a number of new fields which enable the user to quickly establish the duration, opening stock, inflow, outflow, closing stock and variance of each reconciliation adjustment.

View Page

7.1.1.   The Reconciliation view page has been overhauled to provide the detail outlined above as well as the summary table and graph from the Detailed Reconciliation Report.
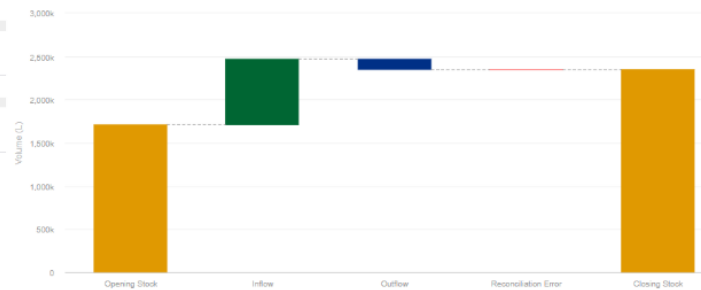
Confirmation Modes

The confirmation logic for reconciliations has had a significant upgrade. The first change is in the Tank Configuration edit page, where 'Automatic Services' has been split into "Gauged Transaction Service Settings' and ' Reconciliation Settings'

Previously users had two options. Within the new configuration options, these would be known as:

Automatic: No threshold is required - all reconciliation adjustments are automatically confirmed

Variance_stop: Threshold is set - when a reconciliation adjustment falls outside the threshold, it is left unconfirmed and the RAS will not calculate subsequent days. This option was seldom used because of the drawback of not being able to see subsequent reconciliations until the first was resolved (which in the case of movements over midnight, is often resolved by an equivalent and opposite adjustment the following day).

Within the 'Reconciliation Settings' section, the user is now able to choose from two additional configuration options to drive confirmation behaviour.

Manual: No threshold is required - all reconciliation adjustments are left unconfirmed

Variance: Threshold is set - this determines which reconciliation adjustments are confirmed/unconfirmed. RAS will continue to run regardless of confirmation state.
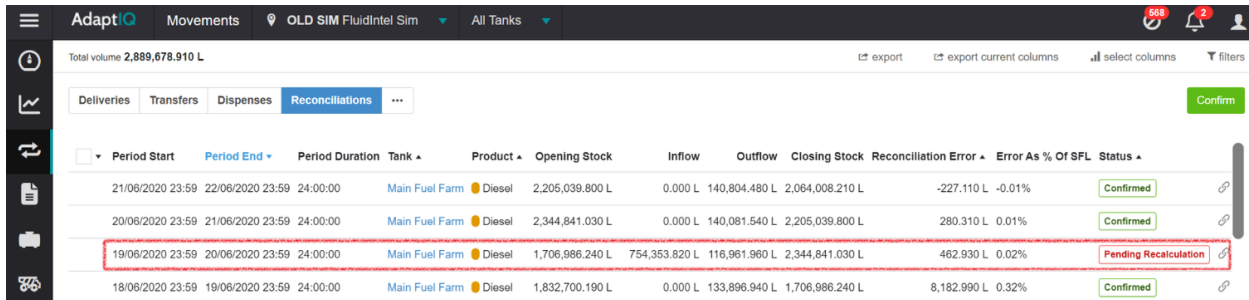
7.1.2.   Update instead of Deleting

Historically when there were changes to movements (new movement created or movement volume edited), the reconciliation adjustments from that period onwards were deleted and recalculated. With the changes above where those subsequent reconciliations could now have been manually confirmed (and so would require reconfirmation), the delete/create approach was becoming increasingly problematic.

With this release, instead of deleting, the affected RAS adjustment/s will be recalculated and subsequent unaffected adjustments will be left unchanged. In the screenshot below, the reconciliations identified as required recalculation have been marked as 'Pending Recalculation'. This will happen when the "Automatic Reconciliation" automated task runs next.

8.   Supervisor Override Challenge

Revision History

Rev.	Description

8.1.   Overview

The Supervisor Override Challenge section of the Movements page is where single use Supervisor Override Codes can be generated and managed. These codes are used to remotely authorise a one-time transaction for a vehicle or piece of equipment that is unable to refuel due to authorisation issues at the dispensing point. For example, a damaged Tag or an off-site vehicle such as an Ambulance would require this method. These single use Supervisor Codes are able to be created instantly by an AdaptIQ user possessing the necessary privileges and will only be valid for the selected AdaptMAC. If the equipment item being dispensed to exists in the AdaptIQ database, but is not being recognised due to a missing tag or similar issue, the vehicle can manually be selected when generating the Supervisor Code for the transaction in the web interface.

The list of Supervisor Override Challenge transactions is a bit different from normal transactions in that, it displays a list of authorised transactions, however the field details for these transactions, such as volume and product, may not have been yet received from AdaptMAC. Whether the details of an authorised

Supervisor Override Challenge transaction have been received or not, is indicated by 'Pending' or 'Processed'.

8.2. Supervisor Override Challenge List View

The Supervisor Override Challenge list shows the following columns:

(*Supervisor Override Challenge - close up of List View*)

8.2.1. Headers

(*In order of appearance from left to right*)

Header	Description
AdaptMAC	The AdaptMAC that the generated Supervisor Override Challenge Code is valid for.
Approver	The AdaptIQ user that authorised the single use code and its related transaction.
Reason	The reason that a Supervisor Override Code was required for, i.e. 'Equipment RFID tag was damaged'.
From Tank	The ID of the tank that dispensed the product.
To Equipment	If the equipment item exists in the database, this column will display the vehicle ID as a clickable link.
Volume	The volume of product dispensed.

Status	This column shows the status of the request as follows: Requested: AdaptMAC sent the request, and waiting for action. Pending: AdaptIQ user generated the response code, and the code is not yet being used by AdaptMAC. Processed: Response code sent, and used by AdaptMAC to start a dispense.

8.2.2. Filters

(Supervisor Override Challenge - close up of Filter view)

(In order of appearance from top to bottom)

Filter Criteria	Description
Keyword Search	Generic field to search where the other criteria are not relevant, or you want to limit the search result to a specific keyword
Dispensing Point	Use this criterion to filter by Dispensing Point (AdaptMAC) , where the Supervisor Override Challenge code was created for. The drop down list contains the list of Dispensing Points in this Site.

| Status | Use this criterion to filter by the status. Select one or more of these types:

Requested

Pending

Processed |

8.2.3. List Actions

The **New** button is the only action button associated with this list

New

Use the **New** button to create a new Supervisor Override Challenge code. More details in the Create/Update Transfer page.

This button is not available is you do not have enough permissions. Check with your system administrator.

8.3. Supervisor Override Challenge Workflow

AdaptMAC	Approver	Reason	From Tank	To Equipment	Volume		
TW001: Test wall MAC 1	seanmccarthy			1311		Pending	
Demo-MAC: Demo-MAC	seanmccarthy			1311		Pending	
Demo-MAC: Demo-MAC	Demo.Admin			DT543		Pending	
Demo-MAC: Demo-MAC	Demo.Admin			DT540		Pending	
Demo-MAC: Demo-MAC	Demo.Admin	Broken Tag				Pending	
RobC: Laptop	gil	Testing i18n		LT5014		Pending	
RobC: Laptop	rob.cornish		Virtual 4-50	0000	0.00 L	Processed	
Demo-MAC: Demo-MAC	rob.cornish			0000		Pending	
RobC: Laptop						Requested	
TW001: Test wall MAC 1	Demo.Admin			985		Pending	
Demo-MAC: Demo-MAC	Demo.Admin			985		Pending	
Demo-MAC: Demo-MAC	Demo.Admin			985		Pending	
Demo-MAC: Demo-MAC	Demo.Admin			DR217		Pending	

(*Supervisor Override Challenge - Workflow*)
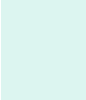
The following steps shows the workflow used for remotely override the process of dispense for only identified and authorized equipment:

1. A Field User at an AdaptMAC selects **Remote Supervisor Override** via the touch screen interface to initiate the process;
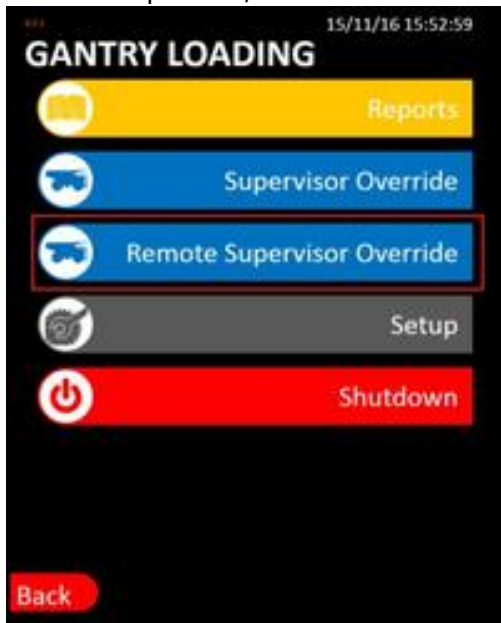
2. The Field User contacts an AdaptIQ user with the necessary privileges via phone or radio, to process the request. In case AdaptMAC, and AdaptIQ are connected over network, the request will appear automatically on the Supervisor Override Challenge page. Otherwise, AdaptMAC user clicks on **Next** to view the challenge code.
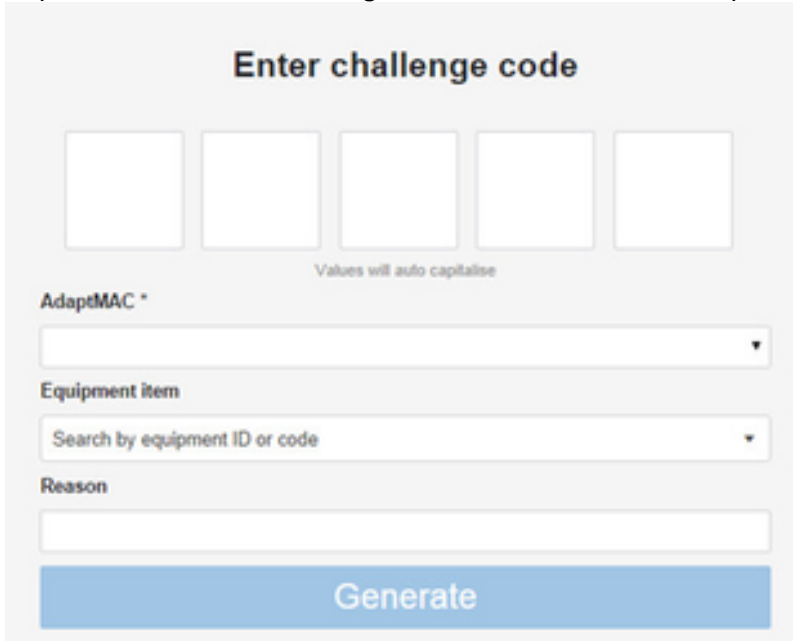
3. In case AdaptMAC and AdaptIQ are not connected, AdaptIQ administrator has to create a new entry, to manually enter the challenge code quoted by the AdaptMAC Field User;
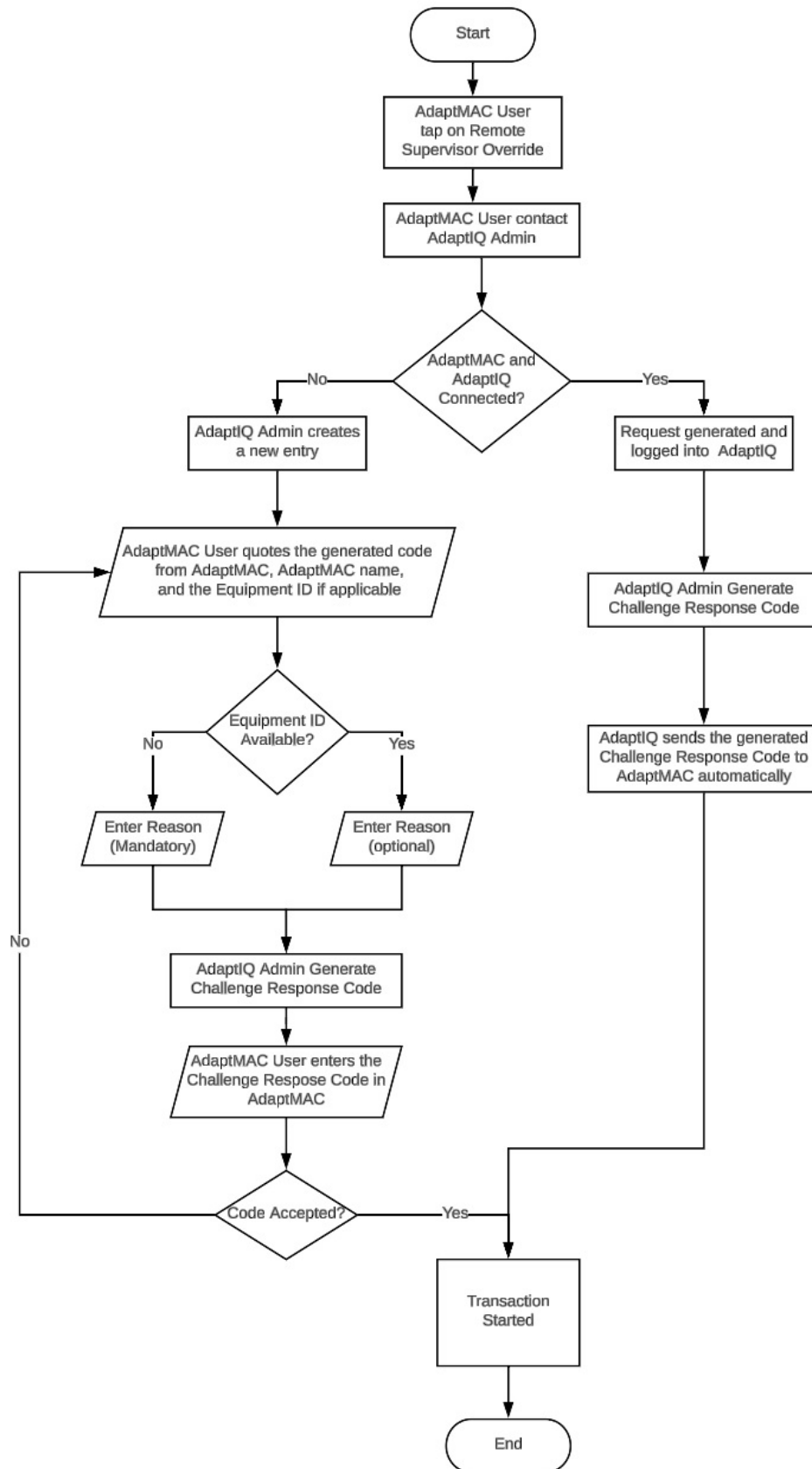
4. The AdaptIQ web user follows the steps below to create the challenge response code.
5. In case AdaptMAC and AdaptIQ are not connected, the Field User enters the challenge response code to authorise a single dispense transaction, and click **OK**. Otherwise the code is sent automatically to AdaptMAC, and the single dispense transaction starts.

Generating the Code:

1. You can start generating the code by either clicking on the New action button to generate a new code for a request received over phone, or to open a received request from a connected AdaptMAC.
2. On the Supervisor Override Challenge page, you may need to **Enter** a **Challenge Code**, in it's not receive over network. This code is generated by a Field User at an AdaptMAC, if the Remote Supervisor Override Challenge feature is Enabled on that particular unit.

3. Once the challenge code has been entered, you then select which **AdaptMAC** the challenge code was generated at.
4. You may select an **Equipment Item** from the list, by searching for an **ID** or **Field ID**, if you know the vehicle that the code is being used for, otherwise you can leave it blank.
5. If you know the specific reason a Supervisor Override Code was required for, you may enter it in the **Reason** field. Please note, this is a mandatory field, if the **Equipment ID** is not available.
6. Once you are satisfied with the entered information, click the **Generate** button to get the Challenge Response Code that you'll need to provide to the Field User at the AdaptMAC to authorise the dispense.
7. In case AdaptMAC is connected, it will receive the code immediately, and the transaction will start. Otherwise, the AdaptMAC user, has to enter the generated Challenge Response Code manually in AdaptMAC.

Challenge response code

2 3 4 8 0

Challenge Code	99999
AdaptMAC	1052.2.1: Link LV DISP/ TANK DEL
Equipment Item	DR220
Reason	AdaptIQ Documentation Test 1
Generated By	Vaughan.richards

(AdaptIQ - Challenge Response Code)

Response for MGXG5

DIESEL
ZZZ 1580 Tank Description

1	2	3
4	5	6
7	8	9
ABC	0	←
Cancel	.	OK

(AdaptMAC - Enter Challenge Response Code)

8. Dispense starts

9.   Delivery Dockets

Revision History

Rev. v9.0.0	Description

9.1.   Overview

Delivery Dockets in AdaptIQ (Prior to version 9.0.0) is used in conjunction with deliveries for tanks with GTS (Gauged Transaction Service) enabled to compare volumes indicated in the delivery docket to volumes calculated from polling the tank gauge values . It's not a movement on itself, but it could be linked to a delivery movement either automatically according to a certain criteria, or manually by entering a delivery docket information in the **Delivery** Section.
After version 9.0.0 Delivery Dockets are created on the **Dockets** page

9.2.   Delivery Docket Automation

9.2.1.   General overview

This release marks a significant change in the way deliveries and delivery dockets can be managed by AdaptFMS. Historically delivery docket numbers were recorded against a delivery with little ability to reconcile a delivery docket with split loads. In this release, delivery docket management has become far more sophisticated. AdaptIQ can now ingest dockets from the fuel supplier's ERP system or Clearing House. These can be sent to the delivery AdaptMAC for the driver to select, enabling each delivery to be recorded against the correct docket. Once the docket volume has been validated, it can then be sent through to the customer's ERP system for payment.

Alternatively where delivery dockets are not available until after a delivery has occurred, the docket received from the supplier can be merged with the one entered in the field by the driver, with the electronic version treated as the source of truth.
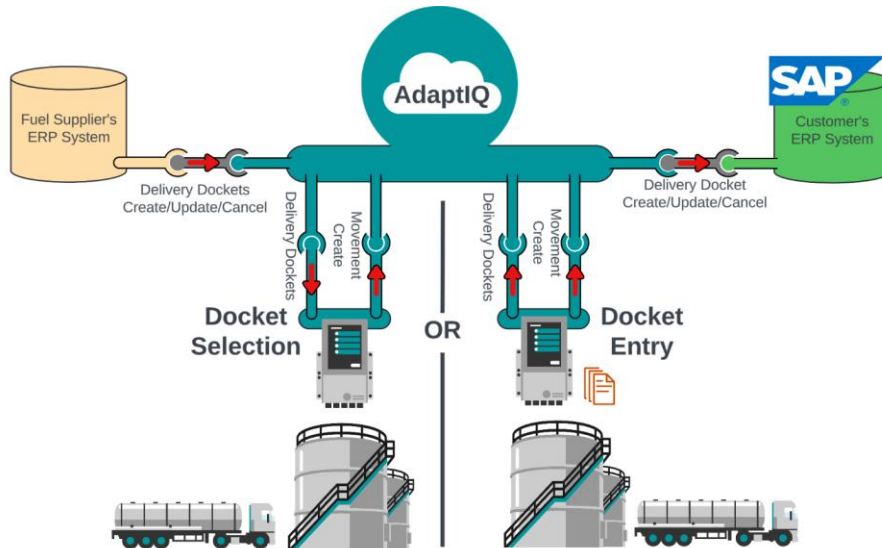
9.3. Delivery Dockets List View

9.3.1. Delivery Docket List Page Changes

The delivery docket list pages has been moved from the movements section to it's own menu item. A number of new fields and filters have been added to make it simple to filter and find dockets based on their source, carrier, supplier or destination.

9.3.2. Delivery Docket View Page Changes

The delivery docket view page has been completely overhauled, with a significant amount of information now able to be recorded about delivery dockets and related movements.
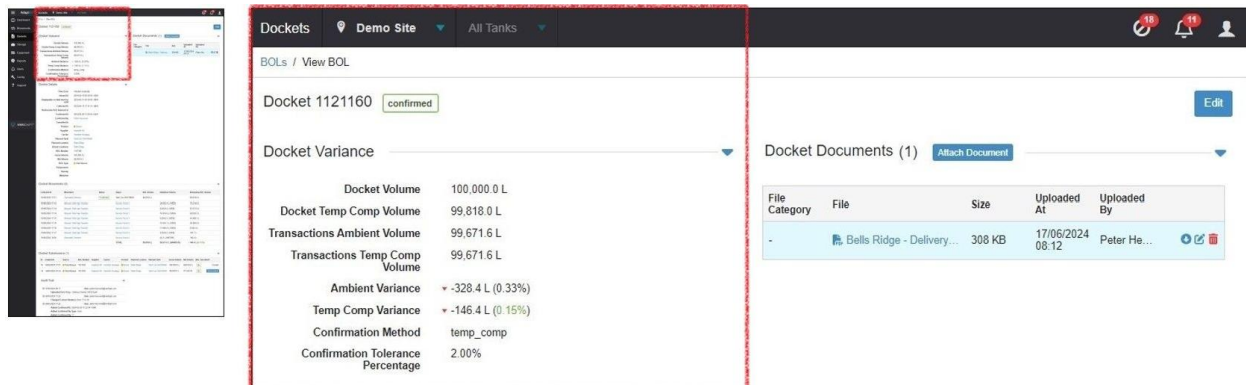
At a high level, the most important changes are:

- Transfers and Dispenses, not just deliveries, can be associated with a delivery docket. This is done where it's not possible to verify the fuel received except by measure the outflows and the tank is completely emptied after each delivery event (so that docket volumes are not mixed).
- Multiple dockets with the same Docket number and Supplier in a specified time range will be merged, allowing field entries and API entries to be consolidated instead of creating duplicates.
- Documents can now be upload to a docket.
- Carriers can now be tracked.

Docket Variance

This section provides a summary of the fields required to decide if the docket can be confirmed. This section is only shown when specific criteria are met (for most users, this will be when a delivery is received from the field).

Further changes are planned to simplify it but currently it provides the ambient and temperature compensated volumes of the docket and the movements used to verify the docket volume.

Docket Documents

This section enables the user to upload documents related to the docket, such as the PDF of the docket itself. Where there are multiple companies with access to AdaptIQ, this can enable sharing of documents.

In future releases, preview functionality will be added to bring it in line with the preview option on the movement pages.
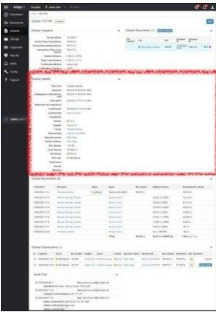
Docket Details

This section provides a summary of all the information that can be recorded about a docket.

Docket Movements

The display of this section varies dependent on the movements that are linked to the docket. For single deliveries (split loads are not yet supported), a simplified table is shown to provide a link to the relevant delivery record. For dockets linked to dispenses and transfers, a more detailed table is shown to enable the user to identify the movements and volume of fuel that has been booked against the docket.
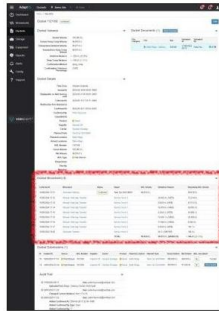
Collected At	Movement	Status	Target	BOL Volume	Validation Volume	Remaining BOL Volume
15/05/2024 17:01	Automatic Delivery	Confirmed	Tank Car GA218669	99,818.0 L		99,818.0 L
15/05/2024 17:12	Manual: Web App Transfer		Service Truck 3		24,603.4 L (WEB)	75,214.6 L
15/05/2024 17:14	Manual: Web App Transfer		Service Truck 5		8,202.8 L (WEB)	67,011.8 L
15/05/2024 17:14	Manual: Web App Transfer		Service Truck 1		16,919.5 L (WEB)	50,092.3 L
15/05/2024 17:15	Manual: Web App Transfer		Service Truck 3		8,204.2 L (WEB)	41,888.1 L
15/05/2024 17:15	Manual: Web App Transfer		Service Truck 5		15,503.1 L (WEB)	26,385.0 L
15/05/2024 17:16	Manual: Web App Transfer		Service Truck 2		17,992.5 L (WEB)	8,392.5 L
15/05/2024 17:17	Manual: Web App Transfer		Service Truck 4		8,200.8 L (WEB)	191.7 L
15/05/2024 18:40	Automatic Transfer		Service Truck 4		45.3 L (METER)	146.4 L
	TOTAL			99,818.0 L	99,671.6 L (VARIOUS)	▼ 146.4 L (0.15%)

Movements can be manually linked to Delivery Dockets from the movement edit page.

Dispenses / Edit Dispensing Transaction

Dispensing Transaction

Dispensing date *	03/05/2024 08:10
Source tank *	Rail Car Tank - 002
Dispensing Meter	On-Track Dispense Meter 1
Target equipment item *	L201 - Loco 5000 Class
Field user	Search by field user name, resource id, or access card id
Volume *	33000.0
Location	East Coast Main Hub
Smu value	
Document Reference	
Delivery Docket	AA-7312-1
Notes	

Volume: 5,001.000 L

Docket Number: CD
Supplier: Shell
Volume: 5.000 L

Docket Number: AA-7312-1
Supplier: BP
Volume: 43,000.000 L

Docket Number: System Generated Number: 911
Supplier:
Volume: 100.000 L

Update   Cancel

Docket Submissions

This section provides a history of the submissions or versions that have been received from external systems, field hardware or web entry. The heirarchy of how these different sources are managed is explained in the management of edits, cancels, redirections and duplicates section.

This new functionality enables the user to switch between different versions by clicking the 'Set as current' button on the right side pf the table. This is useful in scenarios where there are multiple sources of the same docket and the user wants to manually select one.

In the example shown, the original docket was created on the 14th by a web user (see Source column) but when the API version was received on the 15th, the docket volumes (Temp Comp and Ambient) were updated.

Audit Trail

The audit trail delivers the same functionality as elsewhere in the app - the granular detail of changes made are captured for audit purposes.

9.3.3.   Delivery Docket creation options

Delivery dockets can now be created in three different ways:

- API: An API has been added to enable suppliers to push their dockets into AdaptIQ from their terminal management system
- AdaptMAC: While Supplier and Docket number entry have always been available in the field, it is now possible to record more information which is sent through to AdaptIQ and available on the Docket list page.
- Web Manual: Dockets can be manually created in Adapt, again with much more information than previously possible.

Planned and Actual Locations

The concepts of a Planned and Actual location have been introduced to enable customers to track redirections of deliveries. This is to track potential cost changes of a load received at one location that was intended for another. When a delivery, transfer or dispense movement with a different location is assigned to a delivery docket, the Actual Location on the Delivery Docket is updated. It will reflect the Location/s of the related movements.

Automatic delivery creation & Planned Tanks

There are situations such as the delivery of fuel into a rail tank car at a terminal, where the volume of fuel received can not be independently verified immediately. It can only be done much later when the tank car is unloaded and so it must be paid for sight unseen based on the delivery docket volume. To account for this increase in inventory, a delivery needs to be created whenever a docket is received for that tank.

AdaptIQ Tanks can now be configured so that whenever a docket is received with a Planned Tank indicated, a delivery is automatically created to that tank.

Distribution and field management

If Dockets are received electronically from the supplier before the delivery occurs, field devices will pull these records from IQ on a configured schedule to make them available for the driver to select. Where they are not available beforehand, the driver will be able to manually enter the required docket information at the time of delivery (which is then sent to AdaptIQ separate to the delivery record). Regardless of whether it is preselected or manually entered, the delivery record is sent with a Docket reference so that it can be linked in AdaptIQ.

Future releases will enable the delivery docket details for a split delivery to be entered once at the first AdaptMAC, pushed up to AdaptIQ and then distributed to other AdaptMACs. When unloading the second portion of the delivery at another location, this will enable the driver to select the same docket rather than re-entering (saving time and enabling AdaptIQ to reconcile the Delivery Docket with two delivery records.

Management of updates, cancellations, redirections and duplicates

Business logic has been introduced to support how changes to Dockets or associated movements should be managed

Docket updates:

When a docket is first received, a record is created. It is then possible for updates to be received from three different sources - an API integration, a field entry on the AdaptMAC or an entry directly in AdaptIQ. To deal with the scenario where there might be multiple conflicting updates from different sources, a hierarchy of priority has been implemented. The lowest priority is given to field submissions, followed by API submissions and finally web entries. For example, if a docket was received from the field, a record is created. If an update was received via the API, the submission would be recorded and promoted. If another entry from the field was received, it would be recorded as a submission but not promoted because it is regarded a lower priority than an API submission.

When docket values are changed, this will impact auto-created delivery records.

If docket volume, Supplier or Carrier is updated, the delivery movement record is updated

Is the docket's Planned Tank is changed to another tank with 'auto-create delivery' enabled, the Tank of the delivery movement record is updated. If updated to another tank without that feature enabled, the delivery movement volume is set to 0.

If docket is cancelled, the delivery movement volume is set to 0.

Cancellations: Dockets can now be cancelled either via API from the supplier or by an application user in AdaptIQ. This is primarily to assist with potential ERP integrations where a Goods Receipt based on that Docket may need to be reversed.

Redirections: Delivery Dockets can have Planned Tanks, Planned Locations and

Duplicates: Duplicate dockets are merged if they have the same Docket Number and Supplier in a specified period.

The following section details Delivery Dockets prior to update 9.0.0

The delivery dockets list shows the following columns:

Collected At	Docket Number	Supplier	Tank	Volume	Temp Comp Volume	Status	Actions
22/08/2016 15:42	188	Shell	ZZZ 1580 Tank Description	1,000.00 L	0.00 L	Acknowledged	
22/08/2016 15:40	55566	Shell	ZZZ 1580 Tank Description	7,000.00 L	0.00 L	Acknowledged	
11/08/2016 12:20	999		Tank 33-85	999.00 L	0.00 L	Acknowledged	
25/07/2016 07:07	QAD20		Rob Test 2	1,000.00 L	N/A	Acknowledged	
04/07/2016 15:10	QADOCKET9		Rob Test 2	2,000.00 L	N/A	Not linked	Acknowledge
04/07/2016 14:41	QADOCKET9		Rob Test 2	2,000.00 L	N/A	Not linked	Acknowledge
04/07/2016 14:09	QADOCKET9		Rob Test 2	2,000.00 L	N/A	Not linked	Acknowledge
04/07/2016 12:37	QADOCKET17		Rob Test 2	1,690.00 L	N/A	Linked to Delivery	
04/07/2016 11:36	QADOCKET16		Rob Test 2	1,690.00 L	N/A	Linked to Delivery	
04/07/2016 11:35	QADOCKET15		Rob Test 2	1,690.00 L	N/A	Linked to Delivery	
04/07/2016 11:35	QADOCKET15		Rob Test 2	1,690.00 L	N/A	Acknowledged	
04/07/2016 11:35	QADOCKET15		Rob Test 2	1,690.00 L	N/A	Acknowledged	

(*Delivery Dockets - close up of Display area*)

9.3.4. *Headers*

(*In order of appearance from left to right*)

Header	Description
Collected At	This lists the date and time where the delivery docket is recorded in DD/MM/YYYY HH:MM format.
Docket Number	The number indicated in the delivery docket
Supplier	The product supplier for this particular transaction.
Tank	The tank that received the delivery
Volume	The volume as indicated in the docket
Temp Comp Volume	This the volume compensated to 15 degrees Celsius (when a sensor is installed to measure product temperature).

Status	One of the following: Acknowledged: Delivery Docket entry created by AdaptMAC Field User, and has been acknowledged by AdaptIQ administrator, but not linked to delivery. Not Linked: Delivery Docket entry created by AdaptMAC Field User, and neither has been acknowledged by AdaptIQ administrator, nor linked to delivery. Linked to Delivery: Delivery Docket entry has been linked to gauged delivery either automatically by GTS, or manually by adding delivery docket information to a delivery entry in the **Delivery** section.
Action	**Acknowledge** Acknowledge button: Clicking this button will change the status of Delivery Docket entry to Acknowledged

9.3.5.   Filters

No filters are associated with this page.

9.3.6.   List Actions

No action buttons are associated with this page. However, new Delivery Dockets entry could be created by opening the delivery view page of a gauged delivery transaction from the **Delivery** list, and clicking on **Add Docket Information** button.

(Delivery Dockets - close up of Docket Information from Delivery View page)

9.4.   Delivery Dockets Workflow

Delivery Dockets list is used on sites with one or more tanks with GTS enabled. In this case, when a delivery is sent by AdaptMAC or AdaptMCU, it appears on AdaptIQ as a Delivery Docket entry, and

AdaptIQ will not create a delivery transaction until getting more data from the Tank Gauge. On the other hand, the system polls the tank gauge data periodically, and creates a gauged delivery entry where a significant difference in tank level is detected, looks for Delivery Dockets entry within a specific time period, compares the data, and links the Delivery Docket entry to the Gauged delivery. This process happens according to the following steps:
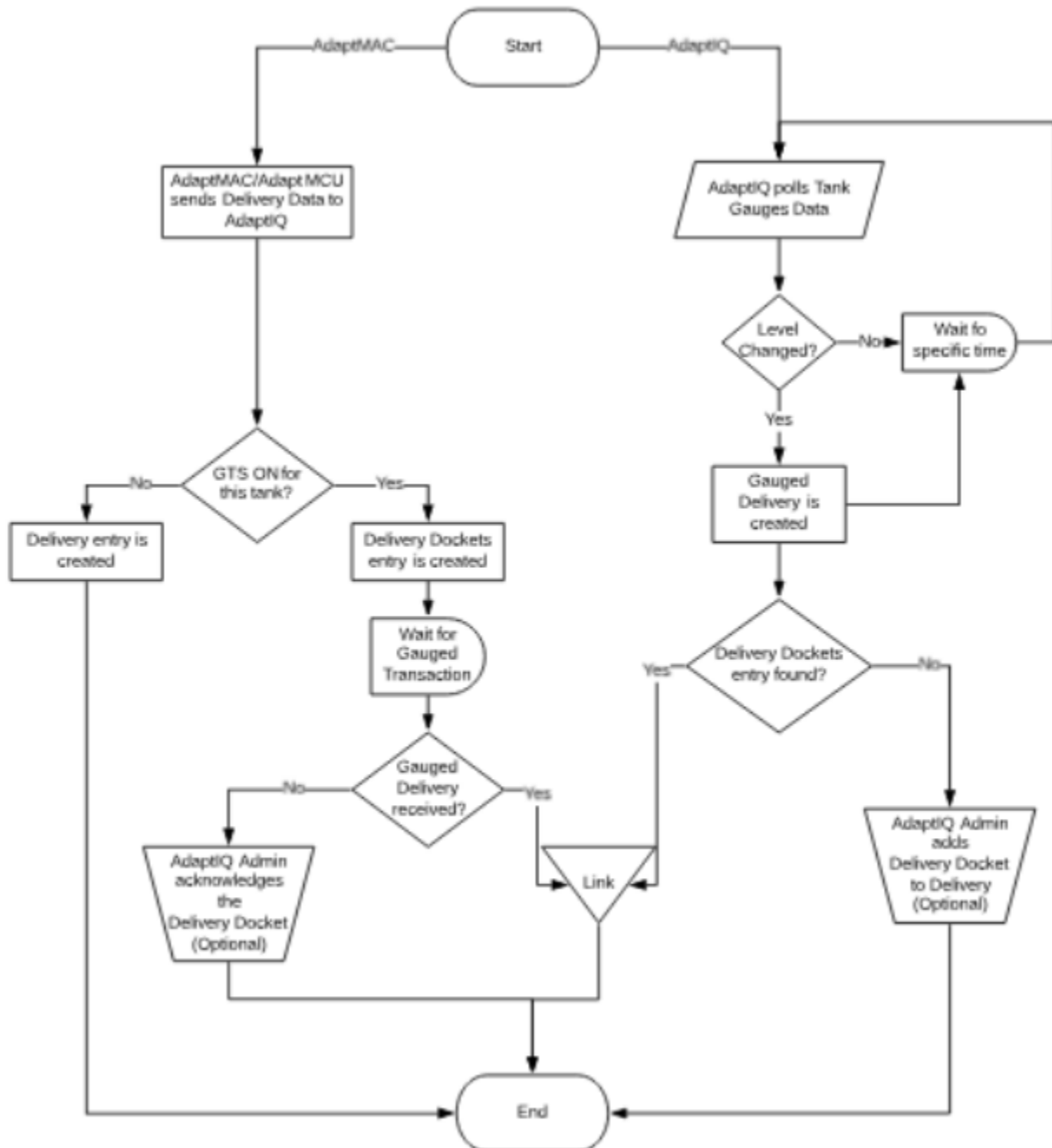
(*Delivery Dockets - Workflow*)

1. AdaptMAC/AdaptMCU sends delivery data to AdaptIQ.

2. If the tank that received the delivery has **GTS** turned On, the delivery is created as an entry in the **Delivery Dockets** list, and no entry is created in the **Delivery** list until a gauged transaction occurs.

3. Gauged Transaction Service (GTS) polls data from the tank gauge every specific time frame. If there is a significant change in the tank level, a gauged delivery transaction is created.

4. The system looks for a **Delivery Dockets** entry created within a specific time frame from the occurrence of the gauged transaction. If found, the system links it to the gauged **Delivery** entry.

5. AdaptIQ user with specific privilege may review gauged deliveries with no linked delivery dockets, and add delivery docket to them. See **Create Delivery Docket** section below.

6. AdaptIQ user with specific privilege may review Delivery Dockets labelled as Not Linked, and acknowledge them.

| 28/10/2015 17:11 | TTT-15 | | Input 1 | 153,600.00 L | N/A | Not linked | Acknowledge |

(Delivery Dockets - Close up of Delivery Dockets Transaction)

9.5. Create Delivery Dockets

The only way to create delivery dockets from AdaptIQ is through the Delivery list, as a gauged delivery has to be detected by the system first, and then you can add a delivery docket to it by clicking **Add Docket Information** button.
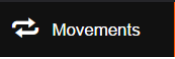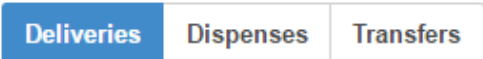
(Delivery Dockets - Close up of Delivery Transaction)

To create a Delivery Docket:

- Click on the **Movements** icon in AdaptIQ left navigation bar;
- Click on Deliveries in the **Deliveries | Dispenses | Transfers** tab in the Movements page;
- Click on the gauged delivery transaction you want to add a delivery docket to, the Delivery View page of this transaction will be displayed.
- Click on the **Add Docket Information** button at the top right of the Delivery Docket section, the **New Delivery Information** form will be displayed.
- Fill in the required fields

- Click on the **Create** button to confirm, or Cancel to return back.

Movements / Delivery Transaction / New Delivery Information

Docket Information

Ambient Volume	
Temp comp volume	
Docket number	
Supplier	▾

Create   Cancel

(Delivery Dockets - New Delivery Information Form)

Field	Description	Data Format	Notes
Ambient Volume	This volume at ambient temperature.	Number in litres	One volume entry has to be created (Mandatory in case **Temp Comp Volume** is not present)
Temp Comp Volume	This the volume compensated to 15 degrees Celsius.	Number in litres	One volume entry has to be created (Mandatory in case **Ambient Volume** is not present)
Docket Number	The number of the delivery docket.	Alphanumeric	Optional
Supplier	The product supplier.	Menu Selection	Optional

10.   Load Plan

Revision History

Rev.	Description
	Gantry Load Plans is an optional feature in AdaptIQ which must be licenced from Veridapt before use. If your current installation does not have Load Plans implemented and you wish to activate the feature please contact Veridapt.

10.1.   Overview

The AdaptFMS Gantry solution is an optional AdaptFMS that enables authenticated and measured transfers from fuel depots by road tankers or by fuel train. The operators at the gantry can either select a Pre-configured Load Plan, a Load Plan Template or create a Manual Load Plan. The first two are generated in AdaptIQ and pushed to AdaptMACs at each gantry, while the Manual Load Plan can be generated locally using AdaptMAC.

Load Plan (aka Gantry Dispense) provides many benefits, to list few:

- Valuable enterprise-wide inventory management with near real-time reporting of transfers into road-trains and fuel-trains from the depots with expected destination details. This is available to all users of the AdaptIQ web application.
- Safety and efficiency with batch-controlled loads providing compartment overfill prevention at the gantries.
- Improved security with loading personnel ID security card or login ID.
- Improved tracking with each tanker identified by RFID.

Load Plans can be initiated using three different methods as follows:
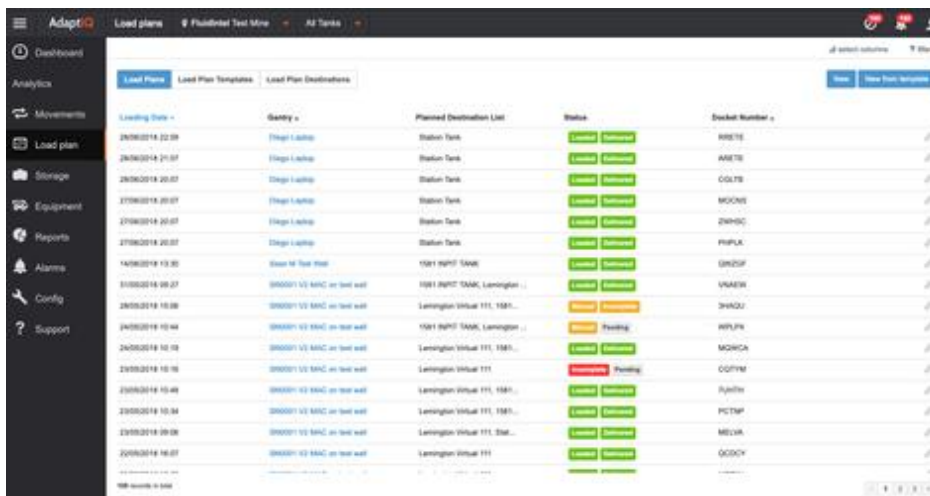
Feature \ Type	Pre-Configured Load Plan	Load Plan Template	Manual Load Plan
Planning	AdaptIQ	AdaptIQ	AdaptMAC
Destinations	Fixed Set from AdaptIQ, can't be modified from AdaptMAC during loading	Flexible Set from AdaptIQ, can be modified from AdaptMAC during loading	Flexible Set from AdaptMAC
Processing	One Time	Multiple	One Time
Load Plan No. and Delivery Docket No.	Generated from AdaptIQ during configuration	Generated from AdaptMAC after picking the Tankers for each Load Plan based on this template	Generated from AdaptMAC after picking the Tankers

The data captured and recorded includes:

- Driver details
- Destination(s)
- Load volumes *per compartment, per tanker* and per road train or rail fuel train.
- This data will allow for better reconciliation of transfers from fuel depots to the various mine sites.
- The transfer data can then be crosschecked against storage volumes and gauged deliveries in the existing AdaptIQ application.

To access this section, click on the [📅 Load plan] icon from the left navigation bar.

(Full view of the Load Plan page

11. Load Plan Prerequisite

Revision History

Rev. v9.0.0	Description
	### 1-Initial Setup
	Notes for changes in update 9.0.0
	### Supporting Rail Tank Cars - Field IDs and RFIDs
	Changes to the tank model now support Field IDs and RFIDs being recorded against a tank. This enables rail tank cars to be easily identified as the source tank for transfer and dispense transactions.
	### Location Management
	Until now, the assignment of tanks into tank farms has been a sufficient way to manage tank storage visibility, transactions and permissions. This is due to the relatively static nature of fixed tanks and service trucks.
	This paradigm fails when considering the movement of tank cars between geographic locations. A tank car can be in one location one day, performing dispenses and transfers, and in a different location the day after. A person that is managing a given location would want to see all the transactions that happen in that location through tank cars, regardless of their current location. This is not supported by tank farm filtering today.
	In order for Tank Cars to move between locations, they need to be configured (as shown below) to automatically update location from the movement.

Config / Tank Types / Edit Tank Type

USER MANAGEMENT

Application Users

Field users

Groups

EQUIPMENT

Departments

Equipment categories

Equipment groups

Cost centres

Rebate levels

Zones

FIELD HARDWARE

AdaptMACs

SCUs

Field Hardware Status

SYSTEM SETUP

Tanks

Tank types

Tank Type

Description *	Tank Car
Tank orientation *	HORIZONTAL
Sensor type *	Level
Tank Location	☑ tanks automatically update location from movement

Update   Cancel

When the first movement from a location is received, AdaptIQ will update the Tank Cars location and it will be shown on that site on the Storage Page under a generic Filter Group with the same name as the Filter Group. This includes when a delivery is automatically created from a BoL with that Tank Car as the planned tank.

While it was developed for Tank Car management, the intent is to continue building out this functionality such that it can be used for all tank types.

Set the permissions for the group:

Select the group you want to set the permission for and click on Edit, then in **Page access** for **Load plan** choose **Editor** and click on the Update button.
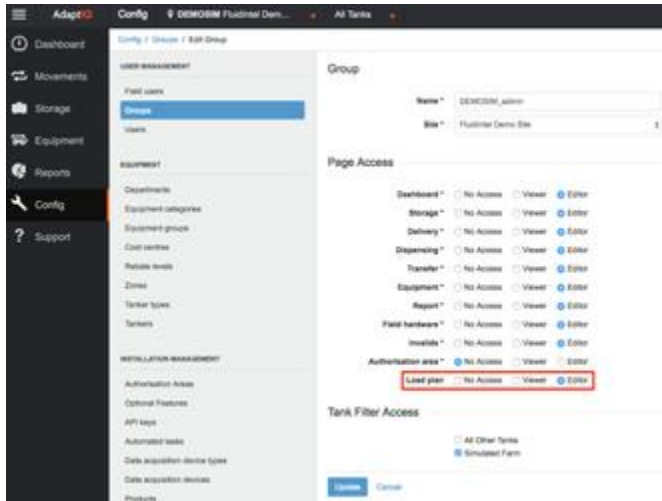
Set one of the site's AdaptMACs as a "Gantry MAC"

To do this, Edit an AdaptMAC via the "Config" page and select one of the three Gantry options as shown below. If you need more information about how to create/update AdaptMACs please refer to the AdaptMACs page in Config.

The Gantry solution is very flexible and allows for:
- Manual Load Plans that may be created in the field at the AdaptMAC by operators.
- AdaptIQ Load Plans with set destinations and date windows that are pushed to Gantry AdaptMACs automatically.
- AdaptIQ Load Plan Templates with multiple destinations and no date restrictions that are pushed to Gantry AdaptMACs automatically.

Select "*Load Plans Only*" if users will be creating complete load plans with fixed destinations in AdaptIQ.

Select "*Load Plan Templates Only*" if users will be creating load plans with a selectable list of destinations in AdaptIQ for selection in the field by the driver.

Select "*Load Plans and Load Plan Templates*" if both complete and template Load Plans will be created in AdaptIQ.

Once the above two steps have been completed, a new menu "Load Plans" will appear in the main navigation menu on the left:

2-Define Tanker Types

Once Initial setup is complete, an AdaptIQ administrator must define the *types* of tankers to be used and then create tankers based on these 'types'.
A Tanker Type is used to define the number of compartments within a tanker and their safe fill level (SFL). The only time a new Tanker Type needs to be created is if an existing Tanker Type doesn't have the appropriate combination of compartments and SFL for the tankers that will be carrying out a Load Plan.

For example, if an existing Tanker Type specifies 5 compartments and an 8400L SFL, but the tankers that are going to be used to complete a Load Plan, from Gantry to Destination, have compartments with an 8400L SFL, but only 3 compartments.

Note You cannot have different sized compartments in a single tanker type, each compartment will have the same Safe Fill Level (SFL) and Capacity.

To learn how to configure Tanker Types please refer to Tanker Types.

3-Define Tankers

Once you have created at least one Tanker Type, you will be able to begin creating individual rail cars and road tankers, simply referred to as Tankers in AdaptIQ.

Tankers are used primarily to track individual road tankers or rail cars and their unique identifier. Load Plan transfers will be generated with a specific Tanker from this list as the target or source, when loading from a gantry or unloading at a destination respectively.

Tankers inherit the number of compartments and the Safe Fill Level from their Tanker Type.

To learn how to configure Tanker Types please refer to Tankers.

12. Pre-configured Load Plans

Revision History

Rev.	Description

12.1. Overview

A Pre-Configured Load Plan is a Load Plan that is configured from AdaptIQ and then pushed to a gantry AdaptMAC for loading. It has a time frame, if not processed within this timeframe, the Load Plan will expire and no longer be available on AdaptMAC. **Then, all Load Plans in AdaptIQ are "Pre-configured" Load Plans.**
The preconfigured Load Plan always has a Number attached to it when it is received from AdaptIQ, and set destinations that can't be modified from AdaptMAC
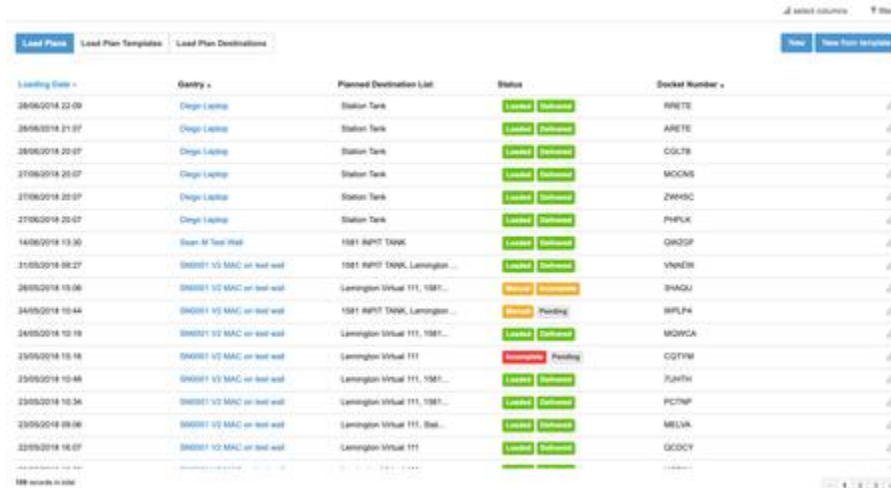
You can create them based on a Load Plan Template or start fresh, both methods are described in the Create Load Plans page.

Type / Feature	Pre-Configured Load Plan
Planning	AdaptIQ
Destinations	Fixed Set from AdaptIQ, can't be modified from AdaptMAC during loading
Processing	One Time
Load Plan No. and Delivery Docket No.	Generated from AdaptIQ during configuration

12.2. Load Plans List View

The load plan list shows any of the following columns, according to the user selection:

(Load Plans - close up of List View)

12.2.1.   Headers

Header	Description
Loading Date	The date & time that the tankers mentioned in a Load Plan were filled at the gantry.
Gantry	The gantry AdaptMAC at which the load plan was recorded.
Planned Destination List	The initial set of destinations planned in AdaptIQ or selected at the gantry by the operator when loading.
Status *	Indicates what stage a load plan is up to; usually displayed as two icons, with the left icon indicating the Loading status (i.e. have all the tankers been loaded yet?) and the right icon indicating the Delivery or Unloading status. (i.e. have all the compartments been unloaded at their various destinations yet?)
Docket Number	A unique identifier for the load plan, generated automatically by the system, which is helpful for referencing specific records or searching for them in the Load Plan list page. It is also used to link individual movement transactions to the related Load Plan and can be used to search the Transfer list page.
Delivery Date	Date and time of the last unloaded compartment
Planned Date	Only applicable to individual pre-planned Load Plans generated in AdaptIQ prior to loading; indicates the date and time that the Load Plan is intended to be loaded at the gantry and executed.
Tanker List	The set of tankers (specified via their unique identifiers) that were used to execute a Load Plan. These may be selected manually at the time of loading, or automatically if using Auto-ID at the gantry.
Actual Destination List	The final set of destinations for a load plan, after any changes. This list may be identical to the Planned list.

Loaded Volume	The total metered volume as recorded at the gantry AdaptMAC for a Load Plan.
Delivered Volume	The total volume that has been delivered for the Load Plan. If the Load Plan was completed manually by a user in AdaptIQ, the delivery volume for each compartment will be set as the loading volume for the compartment.
Variance	The difference between the Delivered Volume and the Loaded Volume, this will often be nothing in the case of Load Plans completed manually by an AdaptIQ user, given that the volumes will be identical.
Operators	The Personnel Card information captured for the Operator who executed the Load Plan. Depending on the system configuration, this may reference a Field User record, or may simply be the captured Card ID, which will need be used to search a third party system to find further information regarding the operator.

*Load Plans Status

Column 1 'Loading Status'	Column 2 'Delivery Status'	Meaning
Editing		The Load Plan is incomplete and can still be edited. See below for switching ownership of a load plan if you need to edit someone else's load plan.
Planned	Delivered	Planned loading status means that the Load Plan is complete and scheduled. Delivered delivery status means that the fuel has arrived
Planned	Pending	Planned loading status means that the Load Plan is complete and scheduled. Pending delivery status means that the Load Plan tanker(s) have not been seen at the destination tanks yet.
Planned	Incomplete	Incomplete delivery status means that not all the allocated fuel was received at the destination tanks.
Incomplete	Pending	Incomplete loading status means that not the allocated fuel was loaded into the tankers. Pending delivery status means that the Load Plan tanks have not been seen at the destination tanks yet.
Loaded	Pending	Loaded loading status means that all allocated fuel has been received in the tanker for transfer. The Pending delivery status means that the fuel has not arrived at the destination(s).

Manual	**Pending**	Manual loading status means that the load plan as created at the AdaptMAC and not in AdaptIQ. The Pending delivery status means that the fuel has not arrived at the destination(s).
Loaded	**Delivered**	Loaded and Delivered status together mean that all allocated fuel has been loaded and received.

12.2.2. List Actions

The following action buttons are available in this section

.il select columns   ▼ filters

New   **New from template**

(Load Plans – Close up of List Actions)

Select columns

The available columns are described above.

Filters

Current Filters

Total selected: 0

Search

Loading Date

Loading Date Range

Gantry

Load Plan Template

Editing

Loading Status

Delivery Status

(Load Plans - close up of Filter view)

(In order of appearance from top to bottom)

Filter Criteria	Description
Search	Generic field to search the deliveries where the other criteria are not relevant, or you want to limit the search result to a specific keyword
Loading Date	Use this filter criterion to search by a previous time frame. You can choose from: day ago week ago month ago year ago
Loading Date Range	Use this filter criterion to search by a specific start and end date and time. To apply this filter follow these steps: • Click on **From** Date or Time to open the calendar and pick up a start date, hour, and minute • Click on **To** Date or Time to open the calendar and pick up an end date, hour, and minute • Click on apply button, to apply the filter.
Gantry	The gantry AdaptMAC at which the load plan was recorded.
Load Plan Template	The name of the load plan template
Editing	Load Plans can be either in editing mode (i.e. they have not been confirmed yet) or confirmed
Loading Status	Indicates what stage a load plan is up to regarding the Loading (i.e. have all the tankers been loaded yet?)
Delivery Status	Indicates what stage a load plan is up to, regarding the Unloading status (transfer out). (i.e. have all the compartments been unloaded at their various destinations yet?)

New

Use the New button to create a new Load Plan. More details in the Create Load Plans page.

New from template

Use the [New from template] button to create a new load plan using a template. More details in the Create Load Plans page.

12.3. Load Plan View Page

Click on a **Load Plan** row to open up the **Load Plan** View page. You can also click on this icon 🔗 to be able to view the view page in a new tab, using a right click.

One particularity of this section is that the view page will change over the time regarding the loading and delivery status.

(Load Plan View Page - full view of a Load Plan Loaded and Delivered)

(Load Plan View Page- Left Pannel)

Field	Description
Gantry	The gantry AdaptMAC at which the load plan was recorded
Planned Date	The date planned for the loading
Expiry Date	The date this load plan will disappear from the MAC, if not executed
Load Plan Template	Link to the Load Plan Template used to create this Load Plan, **if applicable**
Loading Status	Indicates what stage a load plan is up to regarding the Loading (i.e. have all the tankers been loaded yet?)
Assigned to	The IQ user to whom the load plan is currently liked. This user will be able to complete the load plan
Operator	The Personnel Card information captured for the Operator who executed the Load Plan
Load Plan	The load plan number, generated by IQ. A unique ID for the load plan that will be used to generate the docket number.
Tankers	The ID of each tanker
Compartments	A list of the compartments for each tanker and their order
Destinations	List of destinations
Destinations Docket Number	A unique ID generated from the Load plan number, used to link the load plan to transfers transactions
Destinations Planned Volume	The volume initially planned to be transferred
Destinations Unloading Date	The date and time when the last compartment of the load was unloaded
Destinations Unloaded	The unloaded volume for each destination

Double Decker

SFL	8,900.00 L	8,900.00 L
Product	● 15W-40	● 15W-40
Template Volume	120.00 L	101.00 L
Planned Volume	99.00 L	99.00 L
Metered Volume	99.00 L	98.10 L
Planned Destination	Station Tank	Station Tank
Actual Destination	Station Tank	Station Tank

(Load Plan View Page- main page)

Field	Description
SFL	Safe Fill Level for each compartment
Product	The type of product loaded in each compartment
Template volume	The loading volume planned in the template, **if applicable**
Planned Volume	The loading volume planned in the preconfigured load plan
Metered Volume	The loaded volume as recorded by the gantry meters
Planned destination	The destination planned for each compartment
Actual destination	The actual destination for each compartment

(Load Plan View Page- Right Pannel)

Field	Description
Total Loaded	The volume loaded for all compartments and tankers (in litres)
Total Unloaded	The volume unloaded for all compartments and tankers and all destinations (in litres)

13.   Load Plan Templates

Revision History

Rev.	Description

13.1. Overview

The Load Plan Template is a template that is configured from AdaptIQ and then pushed to AdaptMAC to be processed multiple times. It has no time frame and will remain available on AdaptMAC as long as it's not deactivated (disable) from AdaptIQ.
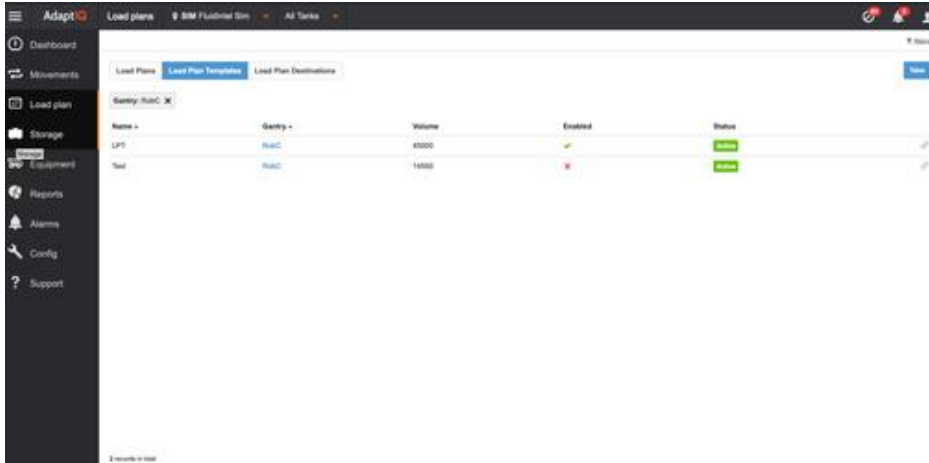
The Load Plan Template has no Number attached to it when it is received from AdaptIQ, a new Load Plan Number will be generated later by AdaptMAC every time a Load Plan is configured based on this template, and accordingly a Docket Number for each destination. The template comes with preliminary destinations that can be modified from AdaptMAC.

When a new Load Plan is configured based on the template, and at least one compartment is loaded, AdaptMAC will send the Load Plan information to AdaptIQ, and it will appear on the same list as the pre-configured Load Plans.

Type / Feature	Pre-Configured Load Plan	Load Plan Template
Planning	AdaptIQ	AdaptIQ
Destinations	Fixed. Set from AdaptIQ, can't be modified from AdaptMAC during loading	Flexible. Set from AdaptIQ, can be modified from AdaptMAC during loading
Processing	One Time	Multiple
Load Plan No. and Delivery Docket No.	Generated from AdaptIQ during configuration	Generated from AdaptMAC after picking the Tankers for each Load Plan based on this template

Load Plan Templates List View

The load plan templates list shows the following columns:

(Load Plan Templates - close up of List View)

13.1.1.   Headers

Header	Description
Name	Name given to the Load Plan Template
Gantry	The gantry AdaptMAC to which the load plan template is sent and can be loaded from
Volume	The total volume loaded in this template
Enabled	Green tick if enabled, red cross if disabled. If disabled, the template doesn't appear in the list of selectable templates
Status	Either active or Editing

13.1.2.   List Actions

The following action buttons are available in this section.

▼ filters

New

Filters
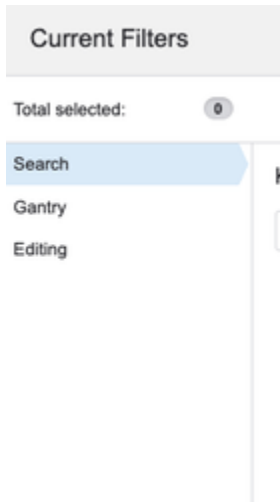
(Load Plan Templates - close up of Filter view)

(In order of appearance from top to bottom)

Filter Criteria	Description
Search	Generic field to search, where the other criteria are not relevant, or you want to limit the search result to a specific keyword.
Gantry	Select this to filter by gantry AdaptMAC to which the load plan template is sent and can be loaded from
Editing	Select this to filter by status, either Editing or Active.

New

Use the **New** button to create a new Load Plan Template. More details in the Create Load Plan Templates page.

13.2. Load Plan Template View Page

Click on a **Load Plan Template** row to open up the **Load Plan Template** View page.

(Load Plan Template View Page - full view)

Field	Description
Name	Name given to the Load Plan Template
Gantry	The gantry AdaptMAC to which the load plan template is sent and can be loaded from
Total Volume	The total volume that can be loaded using this template
Enabled	Status of the template, can be either enabled or disabled. If disabled, the template won't appear in the list of Load Plan Templates.
Tankers	List of tankers
Compartments	List of compartments and their order
Destinations	List of destination(s) for this template
Field	**Description**
SFL	Safe fill level for each compartment
Default Fill Volume	Loading volume by default use in this template for each compartment

13.2.1.   List Actions

The following action buttons are available in this section.

Disable

Clicking on **disable** will change the load plan template status from **enabled** to **disabled** and will result in the incapacity of selecting this template on the MAC as it won't appear in the list of available Load Plan Templates.

✏ Update Definition

Click on Update Definition to edit the Load Plan Template. You will be able to update only the name of the template and the destinations. If you need more changings you should create a new Load Plan Template, refer to this page Create Load Plan Templates.

Load Plan Templates / Edit Load Plan Template

Load Plan Template Definition

Name *	To Sarajii
Gantry *	Rail Gantry
Number of tankers *	2
Tanker Type *	Trailer Barrell
Destinations *	FluidIntel: 1581 INPIT TANK ✖ FluidIntel: 1582 INPIT TANK ✖ FluidIntel: Howick Virtual ✖ FluidIntel: ZZZ 1580 Tank ✖

Update   Cancel

(Load Plan Templates- Update definition)

Edit the fields editable and click on Update or Cancel.

✏ Update Volumes

Click on Update Volumes to change the volumes in the Load Plan Template, you will be bring to the Load Plan Template Compartments page.

(Load Plan Templates- Update Volumes)

Once you have changed the volumes, click on the green **confirm** button at the right top of the page, it will bring you back to the Load Plan Template View page. If you don't confirm, the template will be in **editing** mode.

14.

14. Load Plan Destinations

Revision History

Rev.	Description

14.1. Overview

Load plan destinations is how you indicate which tanks in AdaptIQ are eligible to be recipients of Load plans. If a tank is not selected in the list as a destination you will not be able to transfer fuel to them using load plans.

14.2. Load Plan Destinations List View
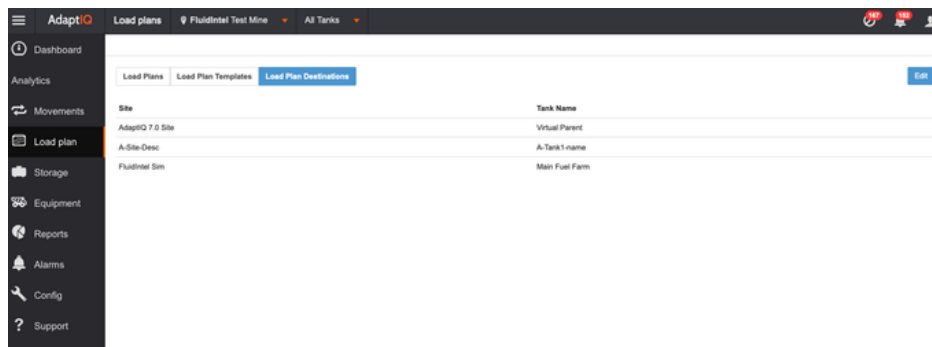
(Load Plan Destinations - close up of List View)

14.2.1. Headers

Header	Description
Site	The name of the Site
Tank name	The name of the Tank

14.2.2. List Actions

Use the **Edit** button to edit Load Plan Destinations. It takes you to a 'Load Plan Destinations' selector. To select more than one destination:

- Windows Users - hold down the control (CTRL) key and left click the desired tanks

- Mac OS X Users - hold down the command key and left click

After selection press on the 'Update' button.
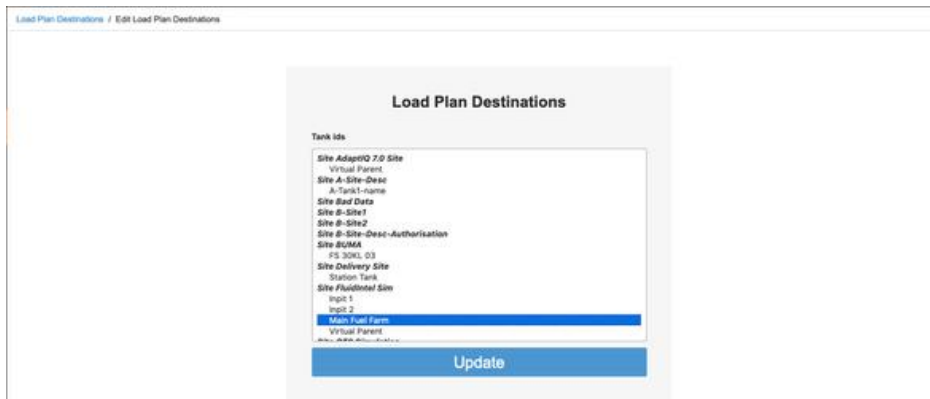
After clicking on the 'Update' button you will be returned to the 'Load Plan Destinations' list page - to change the list, simply repeat the above process.

(i.e., click on the 'Edit' button and re-select the destination tanks.)
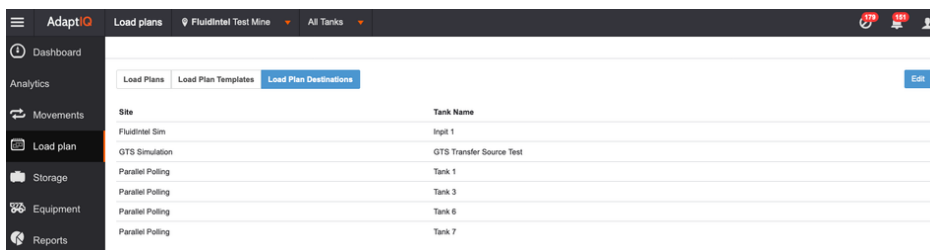
(Load Plan Destinations- List page)

15.   Storage

Revision History

Rev. v9.0.0	**Description**

15.1.   Overview

The **Storage** page gives you a visual summary of the gauged tank levels across the site.

To access this page, click on the [Storage] icon from the left navigation bar.

The storage page can be broken down into the different sections delineated below.

(*Full view of the Storage page*)
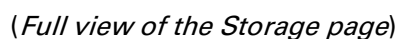
Notes for additions introduced in update 9.0.0

15.2.   Expand/Collapse Headers on Edit & View Pages

To make the movement, docket, equipment and tank new, edit and view pages easier to navigate, the section headers are n
able to be collapsed or expanded. This selection will persist as the user navigates between records, to make it easier to just
show

Edit Page

Storage / Edit Tank

Tank ▲

RFIDs Add ▲

Alarms ▲

Survival Time Parameters ▲

Delivery Settings ▼

☐ Auto-create delivery when docket created

Confirmation Type   manual ⌄

Autoconfirm Variance
Percentage
% of docketed volume

View Page

Storage / Main Hub East - Yard Tanks

Main Hub East - Yard Tanks   Edit tank   New Density Record

Tank graph   Tank details   Tank logs

Tank ▲   Tank Volume   Update Volume

Alarms ▲   Volume   0.000 L

Survival Time Parameters ▼   Temp. Comp. Volume   0.000 L

Enable Survival Time Alerts ✗

Virtual details ▼   Automatic Services ▲

                                Delivery Settings ▼
Is virtual tank? ✓
Has children tanks? ✓   Auto-create delivery when ✗
                                docket created
Tank Name   Confirmation Type   Manual
MHE - Yard Tank 1
MHE - Yard Tank 2   Dispensing Meters ▲

                                Strapping Table Edit ▲

15.3.   Volumes by Filter Graph
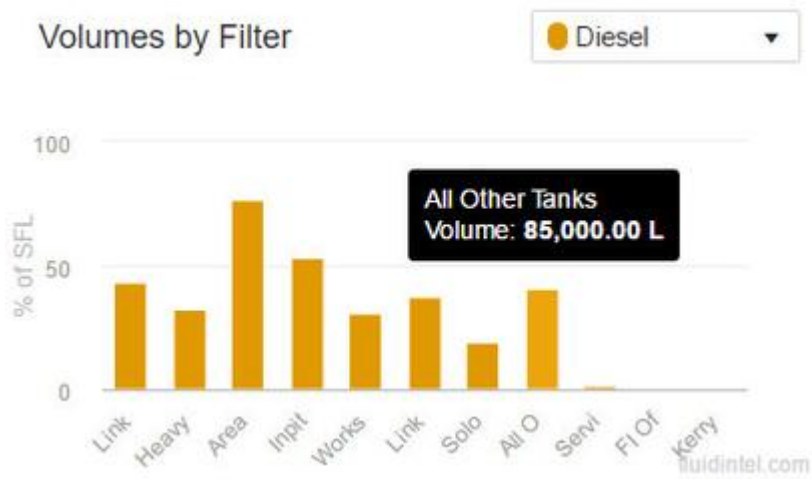
(Storage - *Close up of Volumes by Filter Graph*)

The site tanks are grouped into Tank Filters. The **Volumes by Filter Graph** presents a breakdown of product levels per tank filter. The levels are represented as percentage of the measured volume against the filters' total SFL. By default, the site's main product volume is displayed. In sites with multiple products, you can switch between them through the drop down menu at the top left. When you hover your mouse over any of the yellow bars in the graph, a black box appears displaying the tank filter' current volume.

15.4.   Filters List

(Storage - *Close up of Filters List*)

This section presents a list of the tank filters configured on the site. If the tank filter has any alarms, the number of alarms will be presented in a red badge. You can select a given tank filter by clicking on it. When you do that, the filter's list of tank groups and tanks will be displayed in the page. The tank filter that is selected and is being displayed will have a light blue background.

The **Filters List** section also contains a tab to switch the display of volumes between **Ambient** and **Temperature Compensated** . Temperature compensated volumes are only available on tanks with temperature compensation devices, and **Temperature Compensated** feature is enabled (See the Tanks page to lea how to enable this feature). The current selected button is highlighted blue.

15.5.   Tank Group Summary

(Storage - *Close up of Tank Group Summary)*

This presents a list of tank groups in the tank farm that is selected on the **Filters List**. In case there are multiple products stored in a group of Tanks, the tank group will have a bar per product, please refer to the figure below:
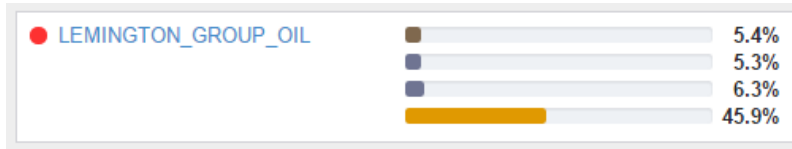
Each bar represents the percentage of the total measured group volume against the group's total SFL. That percentage is also displayed numerically.

If any tank in the group has a communication alarm, a red badge will be shown before the tank group name.

If the list of **Tank Group Details** cannot fit in one screen, clicking on a tank group will scroll the list down or up to the group.

15.6.   Tank Group Details

This presents tank information for all the tank groups selected on the **Filters List**.
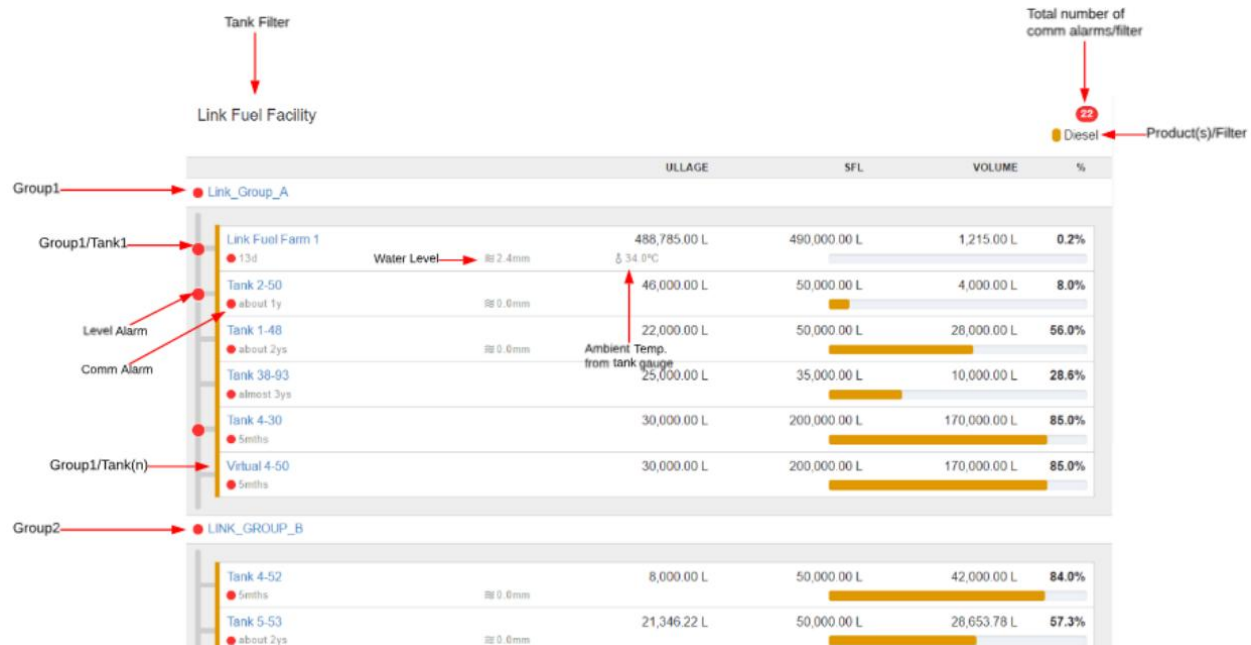
(Storage - *Close up view of Tank Group Details*)

In the above list the Tank Groups under the selected Tank Filter are listed in details with the Tanks inside each Group. At the top of the list. the selected **Filter Name** is displayed to the left, while the total number of communication alarms and products stored in the children tanks of this filter are displayed to the right.

A product is always represented by its name and colour code. This colour code always appears as a badge next to the product name, and in the graphs as the colour of the bar that represents this product.

You can select a colour code for your product in the Products page of the configuration section.
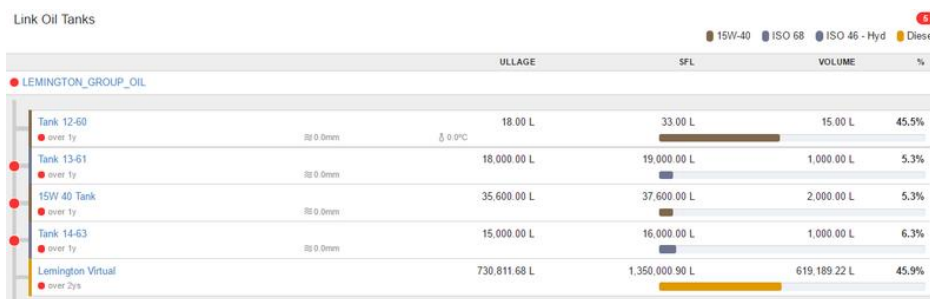
(An example of the Group Details section in case of multiple products)

The List is partitioned by Tank Group, where at the top of each partition the **Group Name** is displayed. A red badge as seen above is shown before the tank group name if there are any tanks in the group that has a current communications alarm.

15.7. Tank Heel

The tank heel volume (product that can't be accessed as it is below the off-take line) has been added to the tank configuration settings.

Tank

Code *	Tank1-code11
Name *	Tank1-code11
Tank type *	B-TankType1
Product *	Diesel
Safe fill level (SFL) *	499000.0
	In Litres
Capacity *	500000.0
	In Litres
Heel volume	
	In litres. The volume in the tank that can not be accessed.

When configured, the heel volume will show in the storage graph.
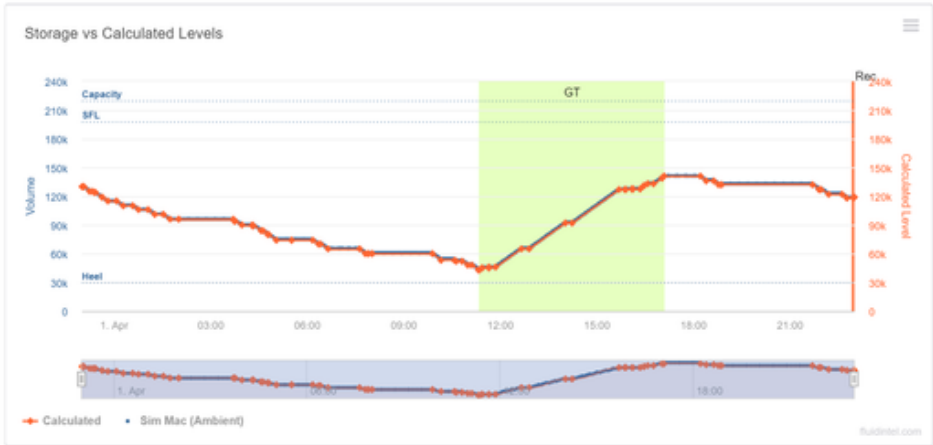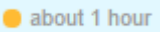
The heel volume is also incorporated in the storage page side bar - the 'Accessible volume' is the current volume minus the heel volume.

15.7.1.   List Headers

In order of appearance from left to right

Header	Description
Level Alarm	A red badge appears before the **Tank Name** if the tank has a storage level alarm, for example, the tank level is too high or too low.

Tank Name	The name of the tank. Click on the link to open the View page of this Tank. You can view the View Tank page by clicking on the Tank Name link, that appears in blue. You can view a **Tank Volumes** section, described below, by clicking anywhere else on the tank row.
Comms Alarm	Indicates the time since the last volume reading as a coloured badge followed by the elapsed time ● about 1 hour . In the Tanks page you can set a warning and alert levels for the time elapsed since last reading, and that reflects on this badge colour as follows: Green: the latest volume reading is less than the warning alarm; Yellow: the latest volume reading is between the warning and alert alarms; Red: the latest volume reading is longer than the alert alarm.
Ullage	The capacity between the current level and the safe fill level. May be negative if the current level is over the safe fill level.
SFL	The Safe Fill Level for this Tank
Heel	product that can't be accessed as it is below the off-take line
Volume	Is expressed in two forms: the exact volume in numerical form, and a graphical representation of the percentage of current product volume versus the SFL of the tank. The colour of the represented bar reflects the colour code of the product. Hover your mouse over the bar to display the product name.
%	A percentage of current product versus the SFL of the tank in numerical form.
Water Level	The water level in this tank. Displayed in grey in the second line, if measured.
Temperature	Ambient temperature of the product as obtained from the tank gauge if available. Displayed in grey in the second line.

15.8. Tank Volumes
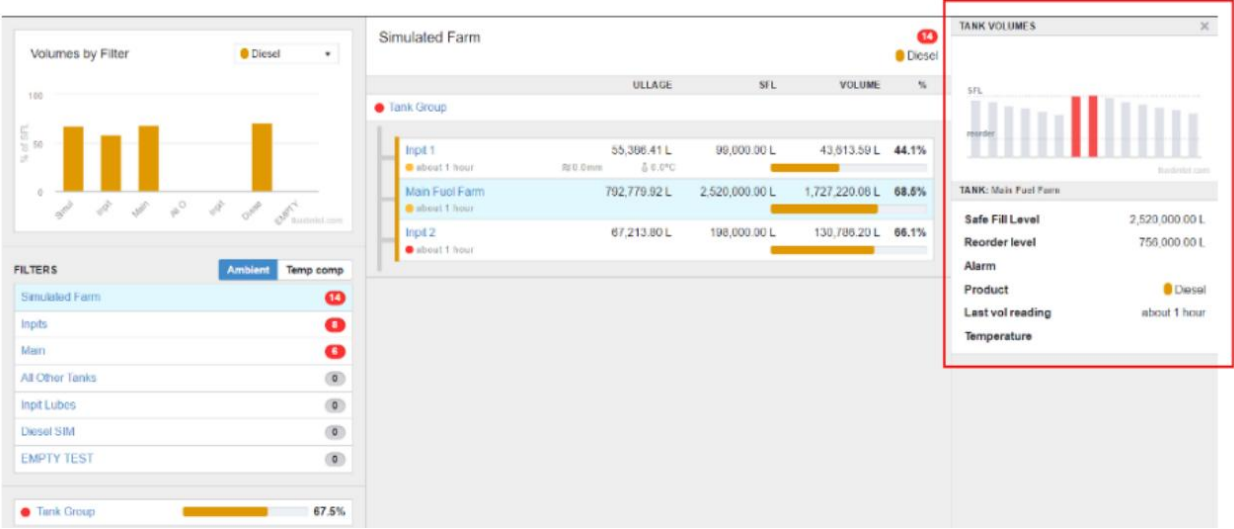
(*When a specific Tank is selected the* **Tank Volumes** *panel will appear to the right*)
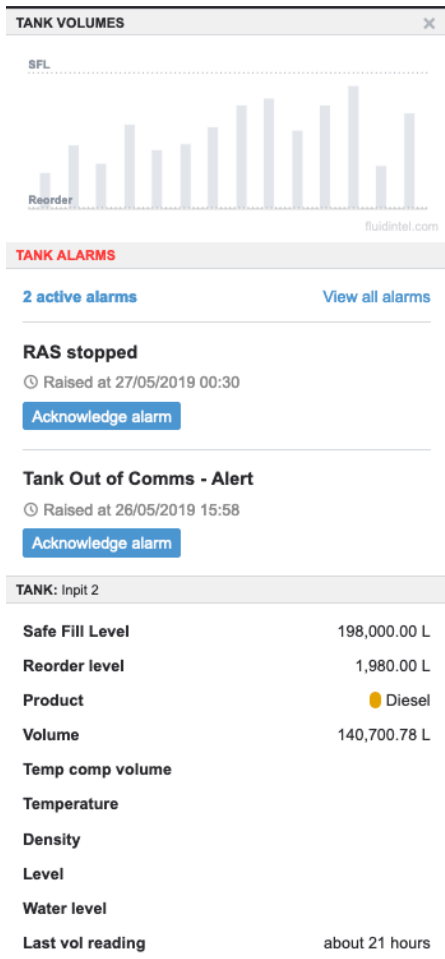
(Storage - *Close up of Tank Volumes*)

The Tank Volumes panel presents a chart with the volumes at the end of the day for the last fortnight. For tanks that are part of a virtual tank, it will also show a link to the virtual parent. This feature can be shown once selecting a specific Tank from the Tank Group Details section.

Field	Description
Graph	Each bar represents the volume at the end of a day. If there was a level alarm on that day, the bar appears in red, otherwise it appears in grey. If you hover the mouse over one of the bars, it will display the date of the reading and the volume at the end of that day
Tank alarms	Displays, if any, the active alarms, acknowledged or not. A button allows you to acknowledge the alarm from here.
Tank	The name of the selected tank

Safe Fill Level	The safe fill level of this tank
Reorder Level	The reorder level for this specific tank.
Product	The product stored in this tank
Volume	It is the volume at room temperature given by a flowmeter.
Temp comp volume	This volume is compensated at 15 degrees Celsius (when a sensor is installed to measure the product temperature).
Temperature	The last temperature reading if a sensor is installed
Density	The density of the product in the tank given by the probe, if it provides the information (not all types provide the density)
Level	Product level
Water level	Water level at the bottom of the tank in mm
Last vol reading	The time of the last successful volume reading for this tank
Parent tank	If a tank has a parent tank, this field will be displayed. Clicking on the parent tank name will take you to the **View Tank** page of this tank.

This graph will display either the ambient volume values or temperature compensated volume values for each tan according to the setting of the Tank. So, for a tank with **Temperature Compensated** toggle enabled, the temperatu compensated volume will be displayed.

16. Storage – Supporting Diesel Service Trucks

Revision History

Rev.	Description
9.0.0	**16.1. Overview**

Supporting Diesel Service Trucks - Compartment Loading

With changes to both AdaptIQ and the AdaptMAC, diesel service trucks can now be configured in AdaptI(with multiple compartments. These are pulled down to the AdaptMAC along with compartment SFL information so that once a truck is identified, the operator can record the volume of fuel remaining in ea compartment which then calculates the batch volume needed to fill.

Once the operator has recorded the volume of fuel remaining in each compartment, this is pushed up to AdaptIQ. For trucks without tank gauges, this reading can then be used as a closing stock reading to reconcile the truck since it last filled. This will make reconciling diesel service trucks much simpler and more frequent.

17. Storage – Calculated Volume

Revision History

Rev.	Description
9.3.0	

17.1. Overview

Calculated Volume on the storage page

Tanks can now be configured to use the calculated volume on the storage page in IQ. When this configuration is turned on:

The volume displayed on the storage page uses a calculated volume (closing stock from the last confirmed reconciliation, plus inflows, minus outflows) instead of showing the last physical reading

Automatic Reconciliation (RAS) must be turned on with a reconciliation adjustment in the last 6 months for calculated volumes to work.

A calculated volume enabled tank displays a 🧮 symbol next to volumes on the storage page. This feature is intended for rail tank cars, trucks and small tanks that don't have a tank gauge.
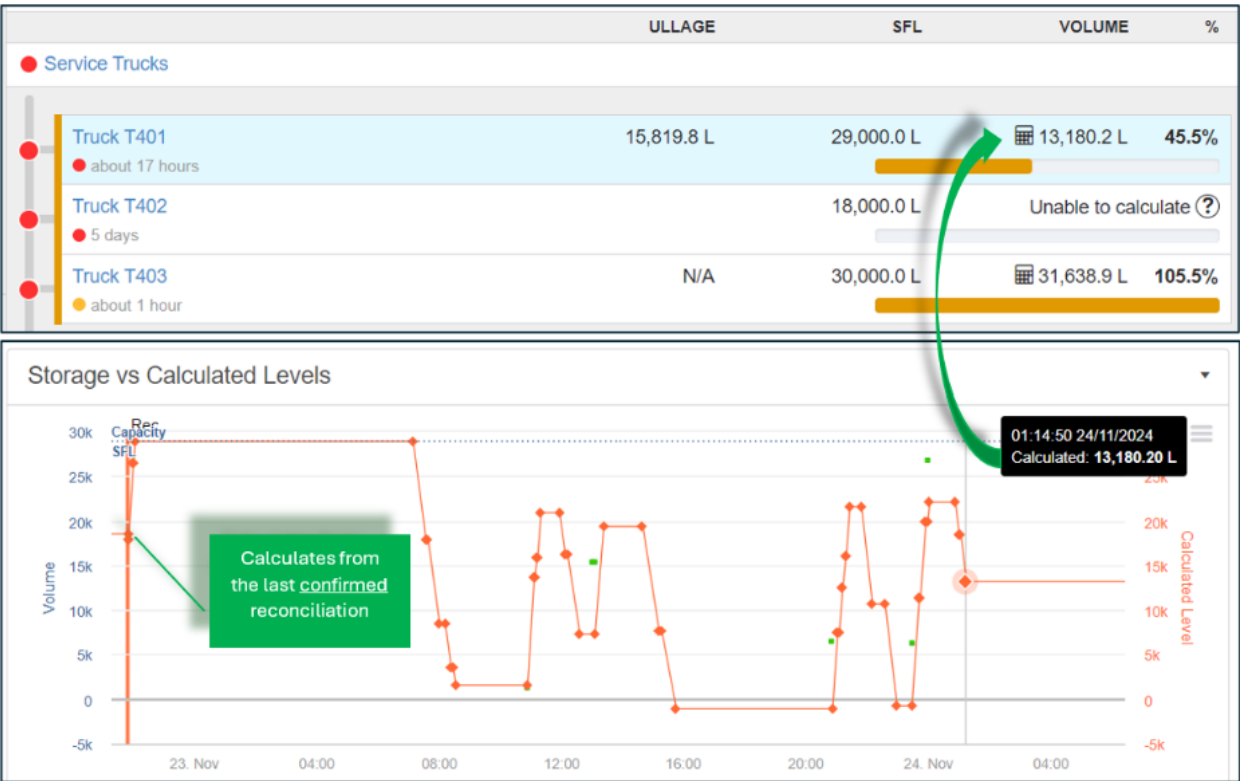
18. Storage - View Tank

Revision History

Rev.	Description

18.1. Overview

This page presents three tabs Tank graph | Tank details | Tank logs at the top left of the page. Use them to navigate between the three sections, this is a great way to see more details on each specific tank on site.
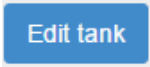
You can access this page using two different ways:

- Clicking on the link associated with the **Tank Name** anywhere in AdaptIQ (i.e. Storage section, Movements section ..etc)
- From the Tanks page under the configuration section, click on the view link next to the Tank (You need to have permission to access this section).

18.2. Actions

The actions associated with this page vary according to the user privileges, and the location where you accessed this page from. The full list of actions are explained below.

18.2.1. Edit Tank

Edit tank

The **Tank View** page has an **Edit Tank** button that allows you to edit the whole Tank parameters depending on your permissions.

(Storage- Edit Tank)

18.2.2.   New Storage Record

You can use this button to record ambient volumes measured by manual dipping. Click on the **New Storage Record** button at the top right of the page to create a new record.

(Storage - Close up of the New storage record)

To create a new volume reading:

1. Enter the **Timestamp** of the reading by using the calendar that appears on the control.
2. Enter the **Ambient Volume** measured at that timestamp.

3. Press the **Create** button to create a new record, or Cancel to return back.

One of the two following buttons should appear:

18.2.3. Recalculate Gauged Transaction

This button appears only if the Tank has **GTS** enabled.

This button deletes all gauged transaction since a specific date, and the system will automatically start to calculate the new levels using the current Tank level detected by the Tank gauge. It's useful to use this feature in case the Tank Gauge has a problem and needs to be calibrated, so the user can delete the old records created during the failure period.

Click on this button, the recalculate gauged transaction form will be displayed

To calculate the gauged transaction from a specific date:

1. Enter the required date, or use the calendar to pick up a date.

2. Press the **Update** button to start calculation, or Cancel to return back.

18.2.4. Reconcile Calculated Line

This button appears only if the Tank has **RAS** enabled, and not a child of a Virtual Tank.

This button deletes all reconciliation adjustments made after a specific date, recalculates the adjustments needed to reconcile the Tank, and creates a reconciliation adjustment transaction if needed.

Click on this button, the reconcile the calculated line form will be displayed

To reconcile the Tank from a specific date:

1. Enter the required date, or use the calendar to pick up a date.

2. Press the **Update** button to start calculation, or Cancel to return back

New Density Record

If the product is selected for the tank, then the following button appear. Click on the **New Density Record** button at the top right of the page to create a new record.

Storage / Inpit 1 / New Density

New Tank Density for Inpit 1 - In-pit TK104

Density *

Jet Group (0.7880 to 0.8385 kg/L)

Create   Cancel

(Storage - *Close up of the New density record*)

1. Enter the **density**

2. Press the **Create** button to create a new density record, or Cancel to return back.

19. Tank Details

Revision History

Rev. v9.1.0	Description

19.1. Overview

The Tank Details page displays all the tank parameters, as been configured in AdaptIQ. The parameters are categorised into sections according to functionality, some of the sections are not relevant to all kind of tanks. The whole set of parameters are described below.
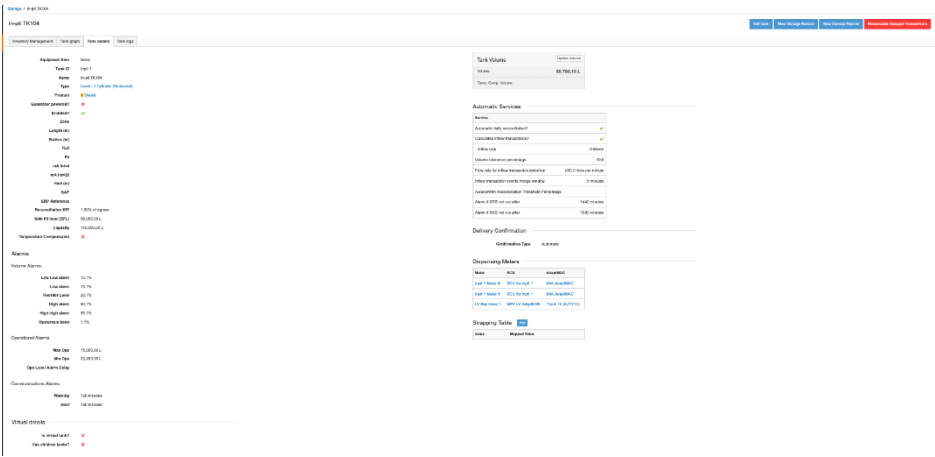
(Full view of the Tank Details page)

Rev. | **Description**

19.2. Tank Details

Equipment Item	None
Tank ID	Inpit 1
Name	In-pit TK104
Type	Level - 1 Cylinder (Horizontal)
Product	Diesel
Generator powered?	✗
Enabled?	✔
Zone	
Length (m)	
Radius (m)	
FLR	
Pa	
mA Int=4	
mA Int=20	
Heel (m)	
SAP	
ERP Reference	
Reconciliation KPI	1.00% of egress
Safe fill level (SFL)	99,000.00 L
Capacity	110,000.00 L
Temperature Compensated	✗

(Tank Details - Close up of Tank Details)

Field	Description
Equipment Item	Displays an Equipment ID to show a link between an equipment and a tank. Mainly used for a Tank that is a part of a Service Truck.
Tank ID	The unique identifier of the tank.
Name	The unique name of the tank.
Type	The physical description of the tank. Has to be one of the tank types listed in the **Tank Types** table. Click on the blue link to display the Tank Type details. For more details about tank types, visit Tank Types page.

Product	The type of product stored in the tank. Colour code and name. Click on the blue link to view Product information. For more details about products, visit Products page.
Generator powered?	A green tick ✅ indicates that the tank is powered from a generator. A red cross ❌ indicates it is not.
Enabled	A green tick ✅ indicates that the tank is enabled. A red cross ❌ indicates it is disabled.
Zone	The zone to which the tank is assigned (if applicable). Zones are a legacy feature in AdaptIQ, and is kept for backward compatibility.
Length (m)	Vertical tank input height of the cylindrical section of the tank (metres).
Radius (m)	The radius of the cylindrical section (meters)
FLR (Fluid Level Range)	The height range of the product for normal operations (metres).
Pa	If a non-scalable pressure transducer is being used to sense the fluid level, the range is shown here.
mA Int = 4	If a PLC or process display is returning the 4-20mA signal, the integer representing 4mA is shown.
mA Int = 20	If a PLC or process display is returning the 4-20mA signal the integer representing 20mA is shown.
Heel (m)	The height from tank bottom from which product cannot be accessed (metres).
SAP	SAP Measurement point, if applicable.
ERP Reference	ERP reference if AdaptIQ is integrated with ERP system
Reconciliation KPI	Key Performance Indicator for the reconciliation

Safe Fill Level (SFL)	This is the Safe Fill Level capacity of the tank (litres). The product level on the tank should not be above this level, for safe operation.
Capacity	The full tank capacity (litres)
Temperature Compensated	A green tick indicates that the tank volume is temperature compensated A red cross indicates that the tank volume is not temperature compensated In order for this feature to be enabled, a sensor with temperature sensing feature has to be installed to this tank

Rev.   **Description**

19.3. Alarm Levels

This shows the level of product at which the system triggers level alarms. The values indicated in this section are customer specific except for Hysteresis band.

(*Tank Details - Close up of Alarm levels*)

Field	Description
Hysteresis band	Hysteresis is the ability to detect significant change. Percentage of the SFL
Low Low alarm	Percentage of the SFL (Safe Fill Level) which triggers a Low Low level alarm.
Low alarm	Percentage of the SFL which triggers a Low level alarm.
Reorder Level	Percentage of the SFL which triggers an alarm to reorder the product.
High alarm	Percentage of the SFL which triggers a High level alarm.
High high alarm	Percentage of the SFL which triggers a High High level alarm.
Max ops	Maximum Operational Volume. The maximum volume to be maintained by the product supplier.
Min ops	Minimum Operational Volume. The minimum volume to be maintained by the product supplier.

Ops level Alarm delay	Set the duration of breach before alarm is raised.
Communication alarm	This shows the time span since last reading at which the system triggers reading alarms. Configure the time frame for a Warning and an Alert alarm.

19.4. Virtual Details

It shows if the tank is a virtual tank or a part of a Virtual tank hierarchy. For more information on virtual tanks, see What is a Virtual Tank? page.

Virtual details

Is virtual tank?   ✕
Has children tanks?   ✕
Child of virtual tank   Lemington Virtual

(*Tank Details - Close up of Virtual details*)

Field	Description
Is Virtual Tank?	A green tick ✓ indicates that the tank is a virtual tank. A red cross ✕ indicates it is not.
Has Children Tanks?	A green tick ✓ indicates that the tank has children tanks. A red cross ✕ indicates it is not.
Child of Virtual Tank	If the tank is a child of a Virtual Tank, the name of the Virtual Tank is indicated in this field as a blue link. Otherwise, this field doesn't exist. Click on the blue link to display the View Tank page of the Parent Tank.

19.5. Tank Volume

(*Tank Details - Close up of Tank Volume*)

Field	Description
Volume	Current volume inside the tank.
Temp. Comp. Volume	This the volume compensated to 15 degrees Celsius. **Temperature Compensated** feature has to be enabled on the Tank, and temperature compensation date from the installed sensor is received to show a value in this field, otherwise NA.

19.6.   Automatic Services

(*Tank Details - Close up of Automatic Services*)

Field	Description
Automatic Daily Reconciliation	A green tick indicates that RAS (Reconciliation Adjustment Service) is enabled for this tank; A red cross indicates RAS is disabled for this tank. For more information about RAS. Please see RAS - Reconciliation Adjustment Service

Calculates inflow transactions	A green tick ✅ indicates that GTS (Gauged Transaction Service) is enabled for this tank; A red cross ❌ indicates that GTS is disabled for this tank. For more information about GTS Workflow. See GTS - Gauged Transaction Service page, and Delivery Dockets page
Inflow type	Delivery or Transfer
Volume Tolerance Percentage	A percentage of the SFL. If a potential gauged transaction volume is over this percentage, a GTS transaction will be created. In other words, if the difference between calculated and monitored volumes increases over this percentage, a transaction will be created. e.g. If the Volume Tolerance is set to 3%, a change in the volume of the tank less than 3% will not generate a gauged transaction. However, if it is more than 3% AdaptIQ will generate a gauged transaction.
Flow Rate (lts/min) for transaction detection	The number of litres per minute at which the gauged volume and calculated volume need to diverge to consider a potential transaction.
Inflow transaction Events Merge Window (mins)	The time span in minutes between the start of a potential delivery and the beginning of another one to consider them as one delivery, and merge them. Example: used for road train deliveries to account for the time it takes the driver to switch compartments and / or barrels. If the window is too small, the delivery will be broken up into smaller deliveries.
Autoconfirm Reconciliation Threshold Percentage	If the volume of a Reconciliation transaction is over this Percentage, the system will confirm it automatically. Leaving it empty autoconfirms all Reconciliation Adjustments
Alarm if GTS not run after	Time before an alarm is raised in minutes
Alarm if RAS not run after	Time before an alarm is raised in minutes

19.7. Require daily reconciliation

A new setting has been added to the Tank Config that will stop reconciliation running unless there was a reconciliation on the previous day. For example, if a tank gauge was to stop working for 4 days and then come back online, reconciliations would not continue until a stock reading was entered on each of the 4 days that were missed.

Reconciliation Settings

☑ Automatic Reconciliation (RAS)

Automatic reconciliation means that every day a reconciliation adjustment movement gets created to reconcile the movement data against volume readings

Reconciliation type variance_stop

Autoconfirm Reconciliation Threshold Percentage 2.0

% of SFL. Corresponds to 580.00 L.

☑ Require consecutive reconciliation days

Reconciliation KPI

As percentage of egress

Alarm if RAS not run after Minutes

Leaving it empty disables the alarm

19.8. Temperature compensated volume entries

For tanks that are managed on a temperature compensated basis, the ability to enter temperature compensated volumes has been added so that these tanks can be reconciled.

Open Temp Comp Dip Reading.jpg

Storage / Diesel Tank 3 / New Volume

New Tank Volume for Diesel Tank 3

Timestamp * 11/09/2024 00:31

Ambient Volume * 12000.0

Temp. Comp. Volume 12100.0

Create   Cancel

19.9. Delivery Confirmation

Delivery Confirmation

Confirmation Type	variance
Autoconfirmation Variance	10.0

(*Tank Details - Close up of Delivery Confirmation*)

Field	Description
Confirmation Type	Indicate the way to confirm a delivery to this tank. Manual: all deliveries need manual confirmation. Automatic: all deliveries will be confirmed automatically. Variance: If the delivered volume is below **Auto confirmation Variance** (explained below), the system will confirm the transaction automatically. Otherwise a manual confirmation is needed.
Auto confirmation Variance	A percentage of the Primary Volume.

19.10. Dispensing Meters

It shows all the meters attached to this Tank used for either dispense or delivery.

Dispensing Meters

Meter	SCU	AdaptMAC
Inpit 1 Meter 8	SCU for Inpit 1	MIA AdaptMAC
Inpit 1 Meter 9	SCU for Inpit 1	MIA AdaptMAC
LV Bay Hose 1	MFF LV AdaptEXB	Truck 13 (KJYY13)

(*Tank Details - Close up of Dispensing Meters*)

Field/Header	Description
Meter	The name of the Meter, as shown in the Description field of this meter. You can open the Meter detail page by clicking on the Meter name that appears in blue.
SCU	The name of the SCU linked to this meter, as shown in the Description field of this SCU. You can open the SCU detail page by clicking on the SCU name that appears in blue.
AdaptMAC	This indicates what AdaptMAC is linked to this meter. You can open the AdaptMAC detail page by clicking on the MAC name that appears in blue.

According to AdaptIQ database Hierarchy, MCU, SCU, and Meter have to be linked.

The new generation of AdaptFMS is using only AdaptMAC, where SCU is no more needed. However, a dummy SCU instant has to be created in AdaptIQ to keep the structure for backward compatibility.

19.11. Data Acquisition Device(s)

The Data Acquisition Device(s) DAD section will only appear if there is a DAD that is linked with the specific Tank. It will display the ID, the type and IP Address of the device. Click on the link attached to the ID to go to the Data Acquisition Devices page located under the Config section. This will allow you to view more details on the device and allow you to edit, dependent on permissions.

Data Acquisition Device(s)

ID	ADAM6017_HWY
Data acquisition device type	ADAM6017
IP Address	192.168.5.10

(*Tank Details - Close up of Data Acquisition Device(s) section*)

19.12. Sensor(s)

The Sensor(s) section will only appear if there is a sensor linked to the specific Tank. Click on the link to go to the Sensors page located under the Config section. This will allow you to view more details on the sensor and allow you to edit it, depending on your privilege level.

Sensor(s)

Slave/PID
1/0

(*Tank Details - Close up of Sensor(s) section*)

19.13. Strapping Table

The Strapping Table will only appear if there is a sensor linked to the specific tank, and it requires a strapping table stored in AdaptIQ.

The strapping table is the data that is used by AdaptIQ to calculate Volume values from values obtained from sensors (typically in Milliamps) by a process of linearisation for certain Data Acquisition Devices.

For some DAD types, the strapping table is not editable from AdaptIQ and is actually stored in the device itself.

Strapping Table [Edit]

Sensor Reading Range	4 - 20 mA
Processing Method	Linearized Lookup Table For 4 To 20 Milliamps

Value	Mapped Value
4.0	0.00 L
20.0	29,902.00 L

(*Tank Details - Close up of Strapping Table section*)

19.13.1.   Edit Strapping Table

To edit the strapping table:

1. Press **Edit** button next to the Strapping Table title, the Edit Strapping Table form will be displayed

Config / NEWDELL DIESEL TANK / Edit Strapping Table

Strapping table for Tank 33-85

Sensor Reading Range	4 - 20 mA
Safe Fill Level	70,000.00 L
Processing Method	Linearized Lookup Table For 4 To 20 Milliamps

Strapping table Add Entry

Value	Mapped Vaule	Actions
4.0	2000.0	Delete
20.0	70000.0	Delete

submit Cancel

2. Press **Add Entry** button to add a new entry, a new empty row will be created to add the mapping numbers.

3. Press **Delete** button next to any row, to delete it.

4. When you finish editing, press **submit** to confirm the changes, or cancel to return back.

20. Tank Graph

Revision History

Rev.	Description
·	**20.1. Overview**

The Tank Graph page shows a One Day or a One Week graph of the Tank levels depending on user's selection. It also shows a table containing the detailed movements happened during the selected period where this Tank was the source or the target.
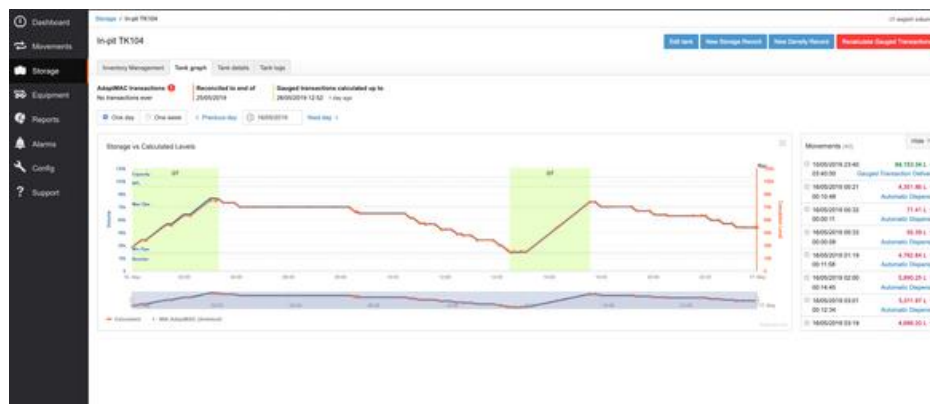
(*Full view of the Tank Graph page*)

V9.3.0

20.2. Calculated Volume on the Storage Page

Tanks can now be configured to use the calculated volume on the storage page in IQ. When this configuration is turned on:

The volume displayed on the storage page uses a calculated volume (closing stock from the last confirmed reconciliation, plus inflows, minus outflows) instead of showing the last physical reading

Automatic Reconciliation (RAS) must be turned on with a reconciliation adjustment in the last 6 months for calculated volumes to work.

A calculated volume enabled tank displays a [calculator icon] symbol next to volumes on the storage page. This feature is intended for rail tank cars, trucks and small tanks that don't have a tank gauge.

	ULLAGE	SFL	VOLUME	%
● Service Trucks				
Truck T401 ● about 17 hours	15,819.8 L	29,000.0 L	▦ 13,180.2 L	**45.5%**
Truck T402 ● 5 days		18,000.0 L	Unable to calculate ⑦	
Truck T403 ● about 1 hour	N/A	30,000.0 L	▦ 31,638.9 L	**105.5%**

Formatting change to Tank Graph

The tank graph has been updated to make the 0 volume line more prominent. This will make it easier for users to see when calculated volumes fall below empty (or rise above the capacity), indicating missing transactions.
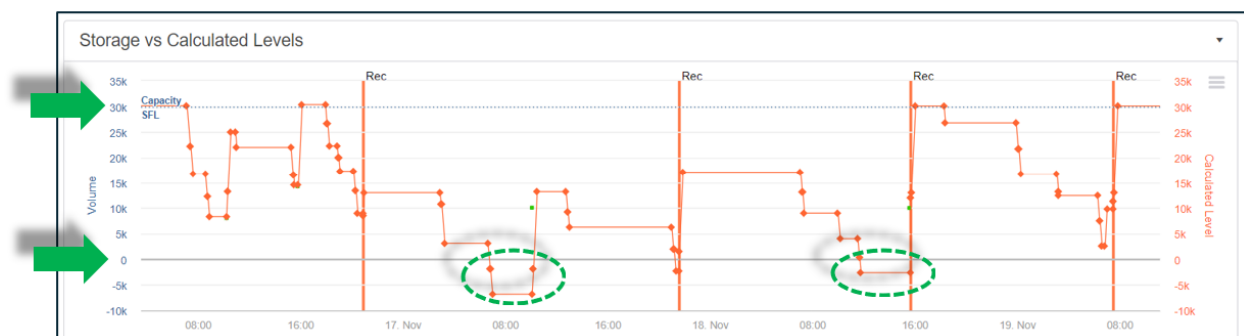
20.3. Storage vs Calculated Levels Graph

This graph displays storage levels, represented by a blue line, versus the levels calculated by the system, represented by a red line, over a period of time. For ideal operation these two lines should be aligned, big gap between the lines shows a problem that needs further investigation.
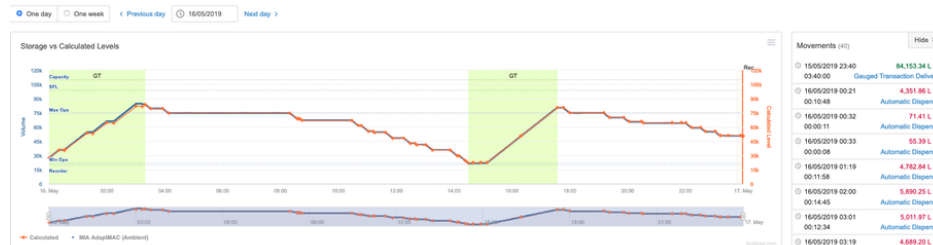
(Tank Graph - Close up of Storage vs Calculated Levels - One Day)
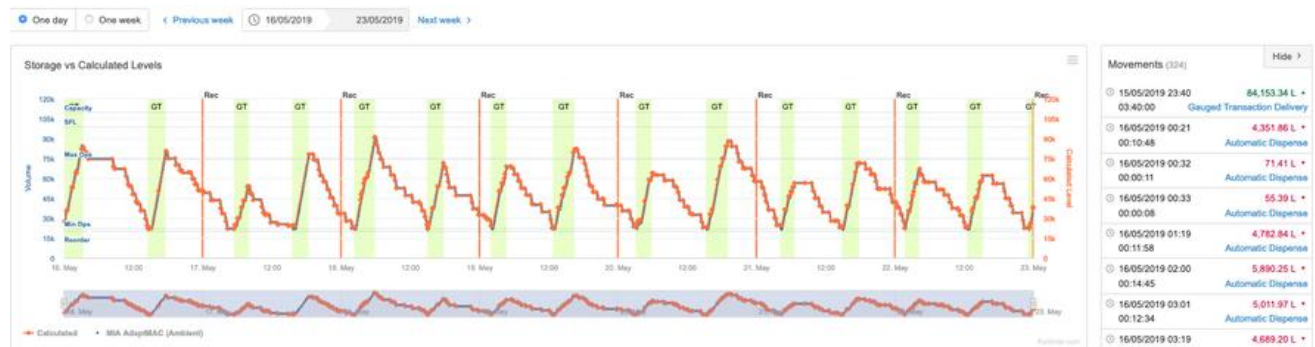
(Tank Graph - Close up of Storage vs Calculated Levels - One Week)

- The horizontal axis shows the date, while the vertical axis shows Storage Levels in litres.
- Gauged Transactions appear as a green vertical bar with **GT** label.
- Reconciliation Adjustments appear as a red vertical line with **Rec** label.
- On the right the list of movements can be expanded or hidden by clicking on Hide or Show movements.

20.3.1.   Actions

- Press on Export Volumes link to export the volumes recorded over the selected period into a CSV file.

- Click on Storage, or Calculated legend under the graph to show/hide the selected line.

- Hover you mouse over a specific point to display the recorded volume at this point.

08:53:00 6/12/2016
Volume: 54,463.94 L
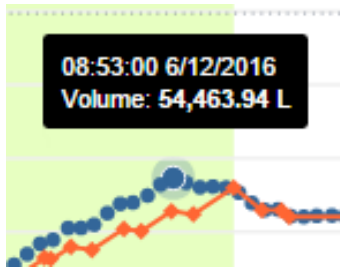
- Select an area on the graph to zoom in for more details. Press **Reset zoom** to reset to the previous view. Under the graph, there is also a bar that allows you to easily zoom in on the period you want to display. Simply use the two buttons on the sides, by moving them closer you zoom in on a period, this automatically changes the graph.
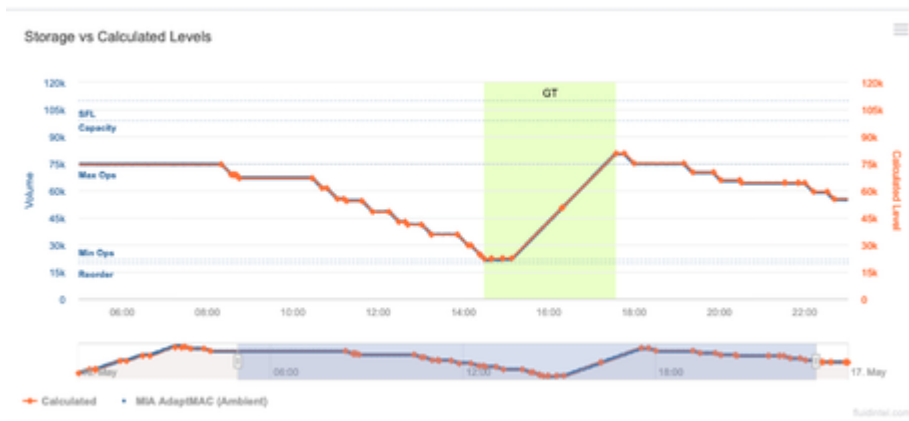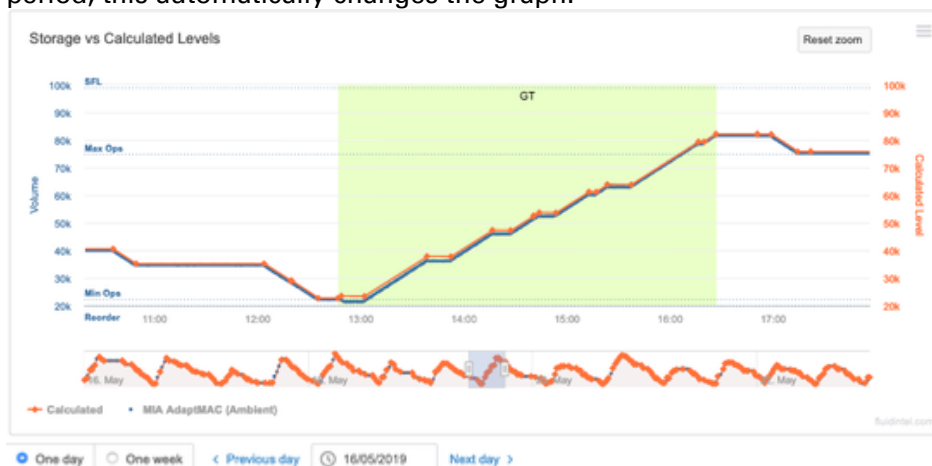
- Select a specific date from the calendar at the top of the graph, and a period to be displayed (One Day, or One Week) to display the graph of this period. The start date is the date selected from the

calendar.
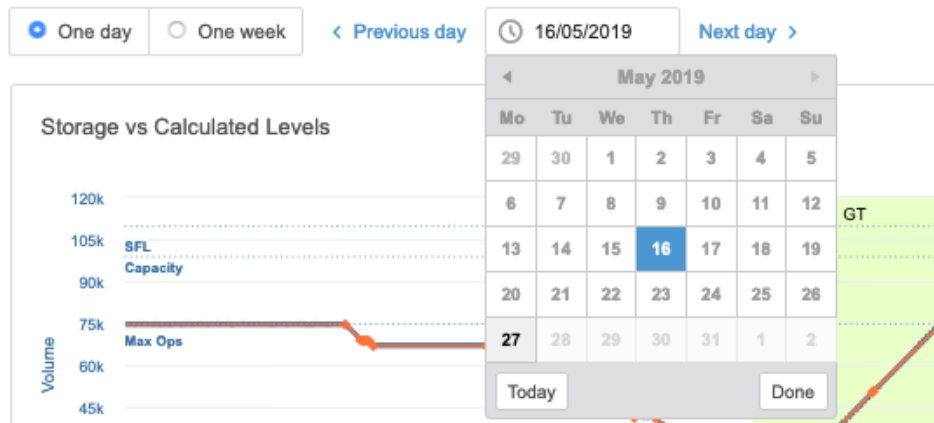
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
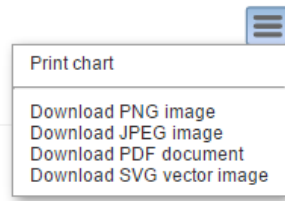
20.4. Movements List

This list on the right shows all the movements transactions happened during the selected period displayed on the graph.

Header	Description
Collected At	Date and Time this transaction started in DD/MM/YYYY HH:MM:SS format.

Duration	The duration of the transaction in HH:MM:SS format.
Type	The type of the transaction.
Volume	The volume of the transaction.

21. Equipment

Revision History

Rev.	Description
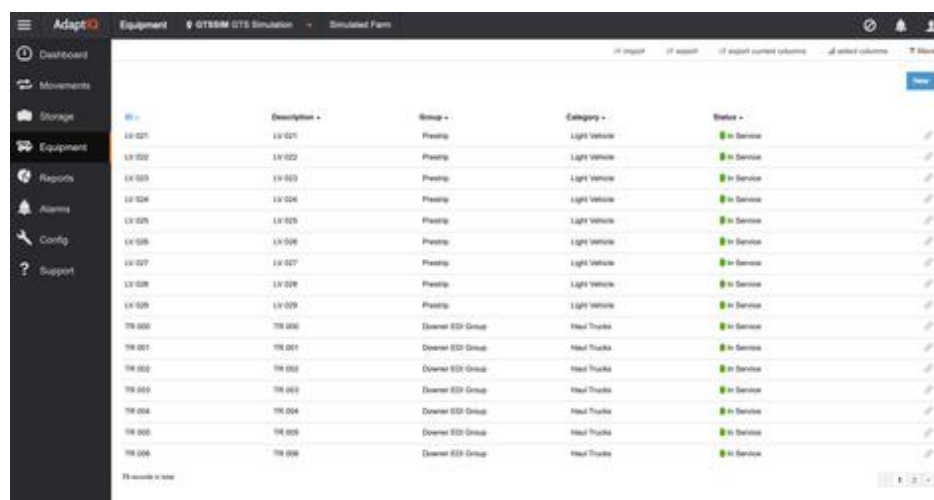
21.1. Overview

The **Equipment** page is where you can manage all plant and equipment items that consume fuel and lubricants. Any equipment item you wish to dispense product to must be created and configured in the equipment list for authorisation at AdaptMACs in the field.
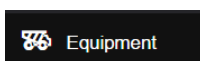
To access this page, click on the [Equipment] icon from the left navigation bar.

(*Full view of the Equipment page*)

21.2. Equipment List View

The equipment list shows some or all of the following columns, according to the customer selection (See Select Columns in the Action section below):

ID ▲	Description ▲	Group ▲	Category ▲	Status ▲	
0000	Shutdown Pad Hire	COAL HAULAGE	Atlas Copco DML-LP Drill	🟡 Out of Service	🔗
010501	Rental Water Fogger	MISCELLANEOUS	Rental	🟢 In Service	🔗
1025892	Coates Hire Gen Set (1581)	GEN SETS	Rental	🟢 In Service	🔗
1304	MF 4245 Cable Handler Tractor	TRACTOR	Cable Handler	🟢 In Service	🔗
1305	MF 4245 Cable Handler Tractor 105 DragL	TRACTOR	Cable Handler	🟢 In Service	🔗
1306	MF 4245 Cable Handler Tractor 104 DragL	TRACTOR	Cable Handler	🟢 In Service	🔗
1307	MF 4245 Cable Handler Tractor	TRACTOR	Cable Handler	🔴 Decommissioned	🔗
1308	New Holland T6020 Cable Handler Tractor	TRACTOR	Cable Handler	🟢 In Service	🔗
1309	New Holland T6020 Cable Handler Tractor	TRACTOR	Cable Handler	🟢 In Service	🔗
1310	Merlo P40-9K Tele-Handle	MISCELLANEOUS	TeleHandler	🟢 In Service	🔗
1310FF1580AC	1580 Air Compressor	MISCELLANEOUS	Sullair Air Compressor	🟢 In Service	🔗
1310FF1581AC	Sullair Air Compressor	MISCELLANEOUS	Sullair Air Compressor	🟢 In Service	🔗
1310FF1582AC	Sullair Air Compressor	MISCELLANEOUS	Sullair Air Compressor	🟢 In Service	🔗
1310OF1580	1580 Lube Farm	LUBE FARM	IRS Lube Module	🟢 In Service	🔗

(Equipment - close up of equipment list)

Rev. **Description**

21.2.1. Default Headers

Header	Description
ID	The ID of the equipment
Description	Equipment Description
Group	The correspondent **Equipment Group** of this equipment. i.e. Service Trucks. Must be one of the groups listed in Equipment Groups table.
Category	The correspondent **Equipment Category** of this equipment. i.e. CAT 773 Service Truck. Must be one of the groups listed in Equipment Categories table.
Status	One of the following Status: In Service, Out of Service, and Decommissioned.

21.2.2. Extra Headers

Header	Description
Field ID	Unique ID used to identify an item across the site or number of sites. Usually displayed on the plate attached to the equipment, and visible by the field users
Field Description	Short description to display on the AdaptMAC or AdaptMCU (if Enabled).
Registration Number	The registration number (number plate) of the equipment item.
Zone	Zone the item is ascribed to.

Department	The Department that the equipment item belongs to. This is an additional categorisation field used differently by different customers.
Cost Centre	Cost centre where the item belongs. Used to link the equipment item to ERP system Cost Centre.
Rebate Eligible	✔ if the equipment item is rebate eligible. ✖ if the equipment item is rebate ineligible.
Rebate Level	The rebate level assigned to this equipment. The rebate level determines the rebate amount claimable by this equipment item.
SMU	The last collected Service Meter Unit for this equipment item.
Contractor	✔ if the equipment item belongs to a contractor. ✖ if the equipment item doesn't belong to a contractor
RFID	A coma-separated list of tags
Authorisation areas	To which authorisation area the equipment is assigned
Make	The make of the equipment
Model	The model of the equipment

Rev.	Description

21.2.3.   Filters

You can search the Equipment List using a set of predefined filters, or use the keyword search for customized search.

Filter Criteria	Description
Keyword Search	Generic field to search where the other criteria are not relevant, or you want to limit the search result to a specific keyword

Group	Select one group or more to display Equipment Items belong to these groups.
Category	Select one category or more to display Equipment Items belong to these categories.
Service trucks	Select to show only the equipment that are service trucks
Cost Centre	Select one cost centre or more to display Equipment Items belong to these cost centres.
RFID	Select one or more RFID tags
Status	Select one status or more to display Equipment Items with these cost statuses.
Zone	Select one zone or more to display Equipment Items belong to these zones.
Department	Select one department or more to display Equipment Items belong to these departments
Authorisation Areas	Select one cost authorisation area or more to display Equipment Items belong to these authorisation areas.

- Selecting multiple items from the same Filter Criterion will increase the selection to the entries that follow either of the selected items under this criterion.
- Selecting two or more Filter Criteria will limit the selection to the entries that follow all the selected criteria.

21.3. Actions

There are a number of actions associated with this page as follows:

21.3.1.   New

Click on the [New] button, to add a new equipment item. For more information visit Add/Update Equipment

21.3.2.   Add/Remove Equipment Items to/from Authorisation Areas

- Use the filters to the right of the page to select the desired Equipment Items
- Click on ⚙ actions at the top of the page, and select one of the options

Equipment Item Actions   ✕

    Add to Authorisation Area

    Remove from Authorisation Area
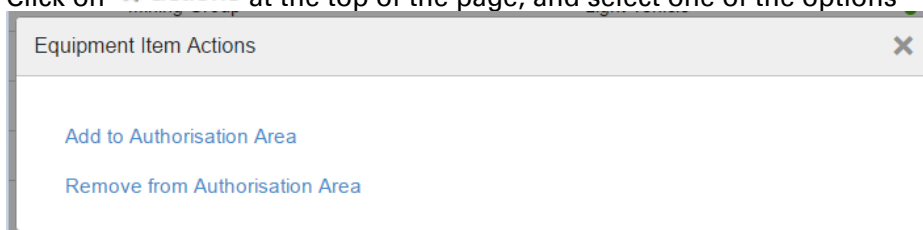
- Pick up the desired Authorisation Area from the list of Authorisation Areas

- Press Add to add the items to an authorisation area, or remove to remove them.

21.3.3. Import/export

This is a powerful tool of integration, it's used to exchange the equipment information between AdaptIQ, and other systems using a csv file (comma separated values).

- Use **import** to add a batch of equipment from a CSV file; choose the file, and click on upload.

- Use **export** to download all equipment items into a CSV file.
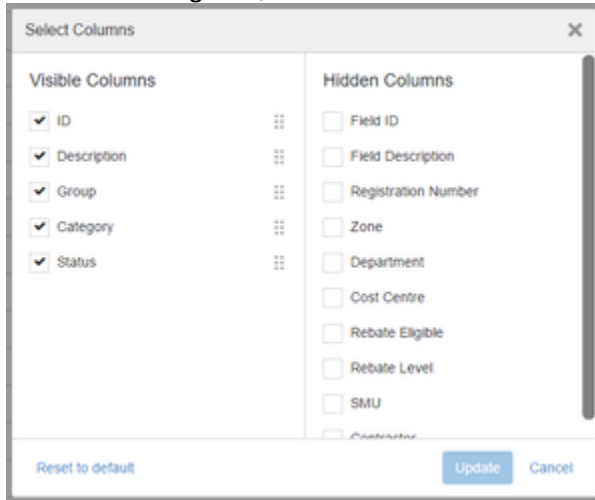
The CSV file must be in a specific format. You can an example using this link.

21.3.4. Select Columns

You can use this feature to add a custom look to the list of Equipment. To select the columns to be displayed:

- Click on Select Columns in the actions section at the top right of the page, this will open the **Select Columns** dialog box;

- The visible columns are displayed to the left, while the Hidden Columns are displayed to the left;
- Unselect a visible column to add it to the hidden columns, or select a hidden column to add it to the visible columns.
- Click on **reset to default** link to reset your selection to the system default.
- Click **Update** to confirm your selection, or **Cancel** to return back.

21.3.5.   Filters

Click on ▼ filters to display the filter window.

21.4.   Equipment View Page

Click on an Equipment Item row to open up the **Equipment** View page.

(Equipment - close up of View Page)

21.4.1. Fields

The fields of the Equipment item are grouped into these sections:

- Equipment Item
- RFIDs
- Profile
- ERP Details
- Service Meter Unit Log
- Product Consumed
- Authorisation Areas
- Recent Service History
- Notification

For more information about the fields in each section, visit Add/Update Equipment page.

21.4.2. Actions

Actions in order of appearance from left to right.

Action	Description
Edit	Click on **Edit** at the bottom of the page to edit the equipment item.

www.veridapt.com

22.   Add/Update Equipment

Revision History
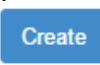
Rev.	Description

22.1. Add/Update Equipment

When you Add/Update Equipment, you configure three sections of the Equipment View Page: Equipment Item, Profile, and ERP Details. To configure the rest of the sections you need to access them one by one from the Equipment View page.

22.1.1.   Adding New Equipment

To add a new equipment:

- Press [Equipment] in the left navigation bar of AdaptIQ, the equipment section will be displayed.

- Press the [New] button at the top left of the Equipment list page, the Equipment Item creation page will be displayed.
- Fill the required fields as described below.

- Press the [Create] button to add a new equipment, or Cancel to return back.

After adding the equipment. You may need to add more data to this equipment (i.e. defining products to be consumed by the equipment). To add more configuration, see **Equipment View** page.

22.1.2.   Updating Existing Equipment

To update an existing equipment:

- o Press [Equipment] in the left navigation bar of AdaptIQ, the equipment section will be displayed.
- o Click on the row that represents the Equipment you want to update (You may use the filters to the right to search for the equipment item), the Equipment view page will be displayed.

- o Browse to the end of the page, and press the [Edit] button, located to the left.
- o Fill the required fields as described below. Please note that not all of the fields are editable in the update mode.

- o Press [Update] button to update an existing equipment.

22.1.3. Equipment Item Fields

Equipment Item

(Equipment - close up of Equipment Item section)

Field	Description	Data Format	Notes

Equipment ID	Unique Code or ID used to identify an item across the whole system.	Alphanumeric	Mandatory Field
Description	Short description of the item, displayed alongside the Equipment ID.	Free Text	Mandatory Field
Status	One of the following: • In Service: equipment that is currently consuming products managed by AdaptFMS for this site • Out of Service: equipment that is not currently consuming products on a temporary basis. It is possible that the equipment is in maintenance. RFID and PIN are still reserved in AdaptIQ to ensure uniqueness. • Decommissioned: equipment permanently not consuming products. When the equipment status is updated to Decommissioned, the system will automatically delete any reference to resources attached to this equipment (i.e. RFID tags). So that these resources may be reused by another equipment.	Menu selection	Mandatory Field
Group	Used to select the Group that the equipment item belongs to. This field is used for grouping purposes, and used differently by different customers. See Equipment Groups page for more details	Menu selection Item of Equipment Groups table	Mandatory Field
Category	Used to select the Category that the equipment item belongs to. This field is used for grouping purpose, and used differently by different customers. See Equipment Categories page for more details It is important to remember that groups and categories do not have to be strictly hierarchical.	Menu selection Item of Equipment Categories table	Mandatory Field
SMU Value Source	SMU stands for Service Meter Unit and is used to drive scheduled maintenance for equipment. Generally, light vehicles use kilometres (km, odometer value), heavy mining equipment use engine hours (hrs) and generators use kilowatt hours (kWh) as their service maintenance unit.	Menu selection	• Mandatory Field • selecting AdaptSMU or None will lock out the next menu "Service Interval Type".

	Select one of three options: • Other - for manual entry of service interval. • AdaptSMU - automatic collection and reporting of an equipment item's engine hours by an installed AdaptSMU RFID tag on the item. • None - engine hours and/or odometer data is not collected		• Selecting None for an existing Equipment Item with Device Meter Unit Log, will delete all the entries in this log
Service Interval Type	Select one of: hrs, km or kWh. This indicates what sort of *Service Meter Unit* is used to monitor consumption of products versus performance for this item. For example, light vehicles would have their service interval type set to *km* as their fuel burn and servicing is based on *km* driven. A heavy vehicle would have *hrs* selected due to its burn rate and servicing being based on *hrs* of run time. This measurement is used to calculate the burn rate for the equipment item which is viewable in reports and the equipment item record itself.	Menu selection	• Mandatory Field • Enabled only if AdaptSMU or None is selected
Service Interval	Indicates how often, in SMU units, that the equipment item should be serviced. For example, a light vehicle may be serviced every 10,000km.	Free Text	
Field ID	Unique ID used to identify an item across the site or number of sites. Usually displayed on a plate attached to the equipment, and visible by the field users	Alphanumeric	
Field Description	Short description to display on the AdaptMAC or AdaptMCU (if Enabled).	Free Text	
Zone	Zone the item is ascribed to.	Menu selection Item of Zones table	Legacy field.
Registration Number	The registration number (number plate) of the equipment item.	Alphanumeric	
Make	Make of the vehicle.	Free Text	
Model	Year/Model of the item.	Alphanumeric	
Fill Point Location	Indicates which side of the vehicle the fuel fill point is located, left or right.	Menu Selection	

Expiry Date	Indicates date and time when the equipment item will automatically marked as "out of service" and removed from the authorised list of equipment items on the AdaptMAC or MCU in the field. This prevents the equipment item from being authorised to receive fuel or lubricants past this date. This is useful to prevent misuse of ID numbers that may have been issued for a short term contractor or similar.	Date	
Rebate Level	Used to select the fuel rebate amount that is claimable on this equipment item. See Rebate Levels page for more details	Menu selection Item of Rebate Levels table	
Department	Used to select the Department that the equipment item belongs to. This is an additional categorisation field used differently by different customers. See Departments page for more details	Menu selection Item of Departments table	
Division	Used to select the Division that the equipment item belongs to. This is an additional categorisation field used differently by different customers.	Free text	
Cost Centre	Cost centre where the item belongs. Used to link the equipment item to ERP system Cost Centre. See Cost Centres page for more details	Menu selection Item of Cost Centres table	
Project code	Assign the item a code related to corresponding project.	Free text	
NGER group	Group code in NGER. This is used to assign a National Greenhouse Emission Reporting code to an equipment item.	Free text	
NPI group	Group code in NPI. This is used to assign a National Pollution Inventory code to an equipment item.	Free text	
IDT	Identification Tag. This is the alphanumeric code of an Adapt IDT tag (a long range RFID), if fitted to this equipment.	Alphanumeric	The IDT is a legacy product and has been replaced by the AdaptSMU.
RFID	Radio Frequency Identification Tag. There can be multiple tags attached to one equipment item. This applies to all RFID authentication systems that are currently integrated with AdaptFMS.	Comma separated, with no spaces between tag ID's	

SCADA PI Tag	Supervisory Control and Data Acquisition system. An identification used in SCADA systems. Used to link equipment items such as generators to external systems.	Free text	
Approver	The name of the person who authorised the equipment item for inclusion in AdaptFMS.	Free text	Not necessarily an AdaptIQ user

Profile

(Equipment - close up of Profile section)

Field	Description	Data Format	Notes
Fuel Tax Rebate Eligible?	Select the checkbox if the item will be used in a government rebate scheme; and if so, the cents-per-litre rebate is applicable (as selected in the "Rebate Level" menu above).	Check box	
Service Truck with AdaptMAC Installed?	Select the checkbox if the item is a service truck with AdaptMAC installed on it. If an item is selected as a service truck, all dispenses to this item will be treated as transfers.	Check box	Only mark an equipment item as a service truck if: • it has an AdaptMAC or MCU installed on it to control and authorise dispenses from itself • the operator is manually tracking dispenses and importing them via CSV import or entering each

Field	Description	Data Format	Notes
			dispense manually in AdaptIQ
Light vehicle?	Select the checkbox if the item is a light vehicle. Used to enforce the "Dispense to Light Vehicle Only" option on AdaptMACs/ MCUs.	Check box	
Transaction updates 3rd party?	Select the checkbox if the item should be flagged to be processed by 3rd parties. Legacy field which tagged equipment item for data export. Deprecated in v4+ as this functionality has been superseded by Web APIs.	Check box	
Pod?	Select the checkbox if the item is actually a small fuel tank or IBC (intermediate bulk container) that is used for dispensing (usually to ancillary equipment such as lighting plant). Different to a service truck in that dispenses to this type of equipment are always categorised as a dispense (consumption) and not as a transfer. Used in the field for RFID authorisation - the AdaptMAC will buffer the ID and display the equipment item if it is a pod.	Check box	
Contractor Vehicle?	Select the checkbox if the item belongs to a contractor.	Check box	Selecting the checkbox will enable the Contractor field below

ERP Details

This section is only required for customers with ERP-SAP integration

ERP details

SAP Measurement Point

☐ SAP exportable?

ERP Reference

Order item

Order number

(Equipment - close up of ERP Details section)

Field	Description	Data Format	Notes

SAP Measurement Point	This is the unique identifier that has been allocated in SAP for this piece of equipment.	Free text	
SAP exportable?	Select the checkbox if the item should be part of the Push Transactions Service.	Check box	
ERP Reference	The reference of this equipment in ERP system	Free text	
Order item	The correspondent order item in ERP	Free text	
Order number	The correspondent order number in ERP	Free text	

Dispense Limiting

This section is available only in the Add/Edit pages. In the View page the below values are displayed as a part of the **Product Consumed** section.

Dispense limiting

☑ Dispense limited?

Dispense limit period * Monthly ▾

(Equipment - close up of Dispense Limiting section)

Field	Description	Data Format	Notes
Dispense limited?	Select the checkbox to limit the dispense for this item. Selecting this feature will enable the **Dispense Limit Period** field.	Check box	• This feature needs to be enabled at AdaptMAC to be function. • Please see Enables page in AdaptMAC User Guide for more details
Dispense limit period	One of the following: Shift, Daily, Weekly, Monthly	Menu Selection	Mandatory if **Dispense Limited** is selected

In this section you can define if this particular equipment is dispense limited or not, and the dispense limit period. To complete the dispense limit feature setup, you need to:

- Open the equipment view page of the equipment, and edit the product consumed section to add a limit for each product consumed by this equipment if required.
- Enable this feature in AdaptMAC

22.2. Service Meters Units Log Section

This section appears only if **SMU Value Source** field in **Equipment Item** section is set to any value other than None. It shows all records of the Service Meter recorded by the system or manually entered.

(Equipment - close up of Service Meters Units Log section)

22.2.1.   Add an entry to the Service Meters Units Log

- Click on the [New] button next to the title, the add entry form will be displayed to add the new value

- Enter the collection time, and the collected SMU Value

- Press [Create] to create a new entry, or cancel to return back.

22.2.2.   Fields

Field	Description	Data Format	Notes
Date	The collection date	Date in DD/MM/YYYY HH:MM format	NA
Hrs, Kms or kWh	The collected amount of service units in Hrs, Kms, or KWh	Number	the unit is dependent on the value of the **Service Interval Type** field

Source	The source from which this data is collected	System generated	NA
Entered By	The name of the user who recorded this entry in case of Manual collection.	System generated	NA
Actions	**View** • Click on View to display the entry view page Equipment / DZ529 / Equipment Item Log Caterpillar D11R - 7PZ Dozer Source — Manual Collected at — 01/02/2017 02:14 Reading — 5020 Calculated — 5020 Kwhs Entered By — Demo.Admin Edit Delete • Click on Edit to edit the entry, or Delete to delete it. **Edit:** this link will only appear if you have permission to edit the entry (i.e. You're the user who recorded this entry) • Click on Edit to edit the entry, this form will be displayed Equipment / DZ529 / Equipment Item Log / Edit Caterpillar D11R - 7PZ Dozer Collected at * 01/02/2017 02:14 Smu value * 5020 Update Cancel • Enter the new values, and click on Update to update the entry, or cancel to return back.	NA	NA

22.3. AdaptSMU update

22.4. SMU Management Improvement

A number of changes have been made to AdaptSMU management to facilitate more accurate burn rate reporting

22.4.1.   Rename 'Reset' and 'Manual' Parameters

Based on feedback, the 'Reset' and 'Manual' parameters have been renamed 'Initial Hours' and 'Hours adjustment' respectively to reduce confusion surrounding their purpose. An explanation of their use has been added underneath for additional clarity.

Equipment / Dozer 002 / New Equipment Item Log

Dozer 002

Manual type	Hours adjustment ⌄
	Hours adjustment
	Initial hours

Initial hours: This should only be entered when a new AdaptSMU tag has been added to an equipment item. It is used to record the equipment's engine hours at the time the tag is installed. eg If a truck has 2700 engine hours when a new tag is installed, the Initial Hours would be 2700. If unknown, no entry is required.

Hours adjustment: If the calculated hours are incorrect, an adjustment can be entered to correct them. It is recommended not to adjust.

Collected at *

Smu value *

Create   Cancel

22.4.2.   SMU Hours Calculation assumes 0 if no Reset value

Previously, when an equipment item had no 'Initial Hours' (formally 'Reset') entered, all calculations for hours (and consequently burn rate) would fail.

With this update, where no 'Initial Hours' value has been entered, the calculation will assume 0 hours as the starting point.

22.4.3.   Default AdaptSMU Source Value

Previously, if an AdaptSMU tag was assigned to an Equipment Item but the 'SMU Source' field is not updated to 'AdaptSMU', the SMU hours were not recorded.

With this update, when an AdaptSMU tag is added to an equipment item (either through the equipment edit page or CSV importer), the SMU Source will be automatically updated to 'AdaptSMU'.

22.5. Product Consumed Section

This is where you can configure the products to be consumed by this Equipment Item.

Product	Safe Fill Level	Disp. Lim. (Weekly)	Service Interval	Burn Rate (L/KWh)	Actions
Diesel	2,000.00 L	N/A	N/A	67.25	view edit
15W-40	106.00 L	N/A	N/A	0.04	view edit
SAE 30	602.00 L	N/A	N/A	0.11	view edit
Hi Flow Diesel Flow Rate	N/A	N/A	N/A	0.0	view edit
Coolant	215.00 L	N/A	N/A	0.13	view edit

(Equipment - close up of Product Consumed section)

22.5.1. Configure a Product to be consumed by the Equipment Item

- Click on **New** button next to the title to add an active product, the add product form will be displayed

- Enter the required fields

- Click on [Create] to create a new entry, or Cancel to return back

22.5.2.   Fields

Fields	Description	Data Format	Notes
Product	Product to be consumed by this equipment	Menu Selection	The menu items are generated from the list of Products configured in this site minus the products that have been already added to this Equipment Item.
Safe Fill Level	Safe Fill Level of the equipment tank that will receive this product.	Number (litre)	This value may be used by AdaptMAC to limit the dispense to this equipment
Dispense Limit (*Interval*)	The volume limit to be dispensed to this equipment over the interval specified between the brackets i.e. weekly	Number (litre/interval)	This field is only available if **Dispense Limited** feature is checked for this equipment
Service Interval	The amount of litres, the equipment item requires service after consuming	Number (litre)	• This field is only available if **Dispense Limited** feature is checked for this equipment

			• The value of this field together with other data collected from the system, are used to generate the Equipment Service Interval Report
Burn Rate	The average Burn Rate for this Equipment Item =Total diesel consumed since this Equipment Item is firstly operated/The incremental value of the service interval for this equipment since it is firstly operated	Number (L/Hrs, or L/KwH, or L/Kms)	This value is used in the Simple Burn Rate Report
Actions	**View** • Click on View to display the entry view page Equipment / DZ529 / View Active Product Caterpillar D11R - 7PZ Dozer Product Diesel Safe Fill Level 2,000.00 L Dispense Limit 5,000.00 L / Weekly Service Interval Volume 1,000,000.00 L Edit Delete	NA	NA

- Click on **Edit** to edit the entry, or **Delete** to delete it.

Edit

- Click on Edit to edit the entry, this form will be displayed

Equipment / DZ529 / Edit Active Product

Active Product

Product *	Diesel
Safe fill level	2000
	Litres
Dispense limit volume	5000.0
	Weekly
Service interval volume	1000000
	Litres

Update   Cancel

- Enter the new values, and click on **Update** to update the entry, or cancel to return back.

22.6. Authorisation Areas Section

This section lists all Authorisation areas this Equipment Item belongs to. Click on any Authorisation Area from the list to view it.

Authorisation areas   **Edit**

Authorisation Area
The heavy equipment
Inpit 12 Auth Area

(Equipment - close up of Authorisation Areas section)

22.6.1.   Edit the Authorization Areas

To change the Authorisation Areas the Equipment Item belongs to:

- Click on the **Edit** button next to the title, the Authorisation Areas selection form will be displayed.

Equipment / DZ529 / Authorisation Areas

ⓘ Unselecting all areas authorises this Equipment Item for the whole site

Authorisation Areas

Limit access to the following
Authorisation Areas

☑ The heavy equipment
☐ Lighties
☑ Inpit 12 Auth Area
☐ QA Desc

Update   Cancel

- Select the areas you want to add the Equipment Item to, or unselect all the areas to authorise the Equipment Item for the whole site.
- Click on **Update** to update the authorisation areas, or Cancel to return back.

22.7. Recent Service History Section

This section displays the service history of the Equipment Item.

Recent service history   **New**

Date	Comments	Actions
23/12/2016 14:30	Pass	view edit
08/06/2016 14:29	Pass	view edit

(Equipment - close up of Recent Service History section)

22.7.1.   Add an entry to the Recent Service History

- Click on the **New** button next to the title, the add entry form will be displayed

Equipment / DZ529 / New Equipment Item Service

Caterpillar D11R - 7PZ Dozer

| Service date | 01/02/2017 14:37 |
| Comments | |

Create   Cancel

- Enter the Service Date, and a comment

- Press **Create** to create a new entry, or cancel to return back.

22.7.2.   Fields

Field	Description	Data Format	Notes
Date	The service date	Date in DD/MM/YYYY HH:MM format	NA
Comments	Free Text, usually used to report any pending service issues	Free Text	NA

				NA	NA
Actions	**View** • Click on View to display the entry view page Equipment / DZ529 / Equipment Item Service Caterpillar D11R - 7PZ Dozer Description Caterpillar D11R - 7PZ Dozer Service Date 23/12/2016 14:30 Comments Pass [Edit] [Delete] • Click on [Edit] to edit the entry, or [Delete] to delete it. **Edit** • Click on Edit to edit the entry, this form will be displayed Equipment / DZ529 / Equipment Item Service / Edit Caterpillar D11R - 7PZ Dozer Service date 23/12/2016 14:30 Comments Pass [Update] Cancel • Enter the new values, and click on [Update] to update the entry, or cancel to return back.				

22.8. Notification Section

This section is used to add a Notification message that will be displayed to the field user when a dispense is made to this Equipment Item. Only one message could be added per Equipment Item.

Notification [Edit] [Delete]

Message	Expiry
This is a test message	17/02/2017 00:00

(Equipment - close up of Notification section)

22.8.1.   Add/Edit a Notification

- Click on the [New] button next to the title if there is no added message, or [Edit] if a previous message has been configured. The add message form will be displayed

Equipment / DZ529 / New Equipment Item Notification

Caterpillar D11R - 7PZ Dozer

Notification Message *

Notification Expiry *

[Update] Cancel

- Enter the Notification message, and the expiry date
- Press [Update] to create a new entry or to edit the previous message, or cancel to return back.

22.8.2.   How is the Notification displayed?

When AdaptMAC user starts a dispense, the notification will be displayed On Screen as seen below

Notification

985 Caterpillar 773G
Fuel & Lube Truck
This is a test message

Cancel   Continue
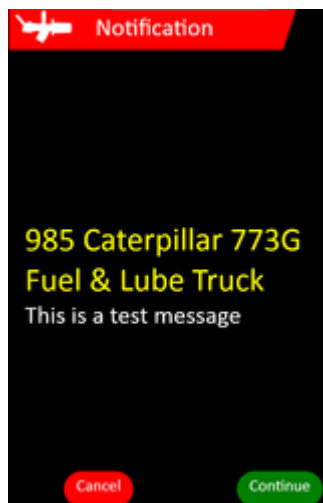
23. Field Fault Reporting

Revision History
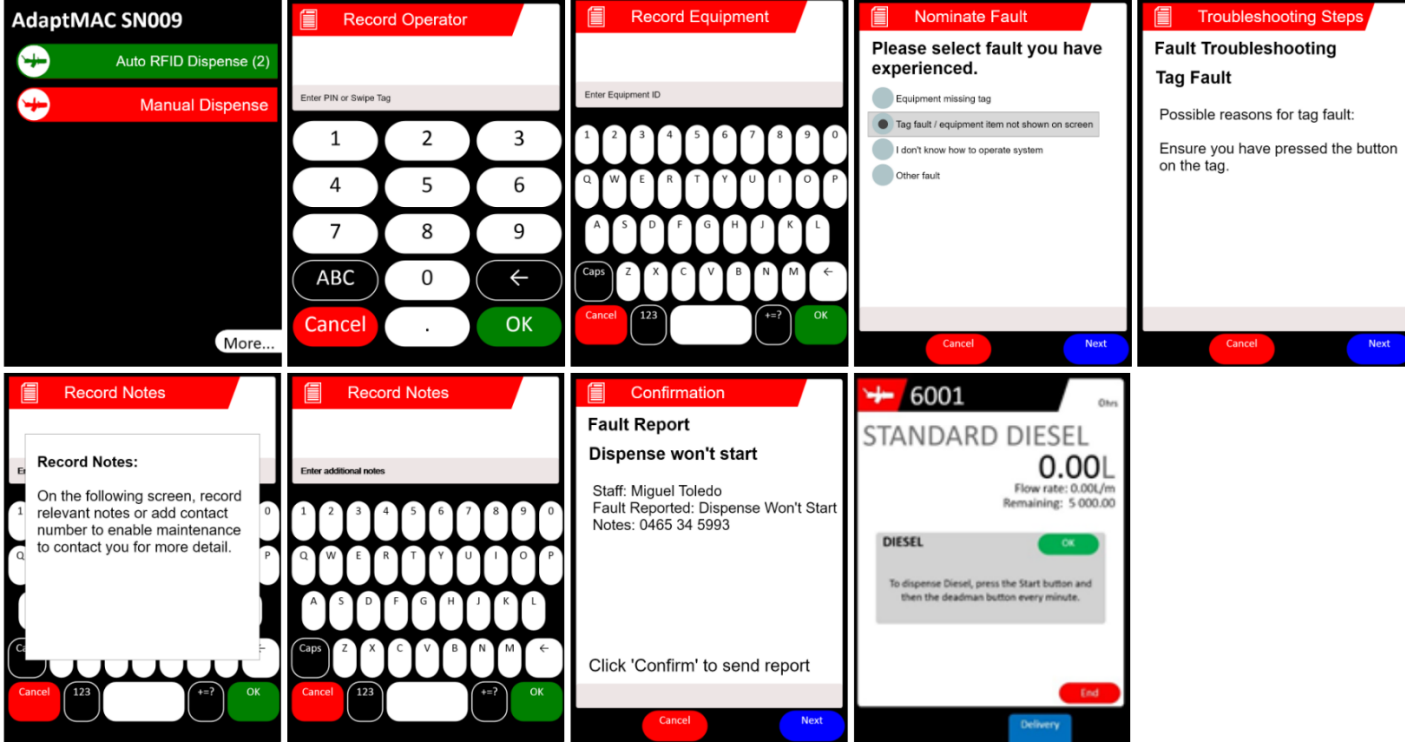
Rev. v9.0.0	Description
	### Field Reporting - Movement Override Fault Reporting
	For sites using RFID or SMU tags to identify equipment, a significant challenge is how to manage situations where auto-ID is not possible. A common solution is to enable Manual dispense, but when this is left enabled, it can result in overuse, reducing the data quality. The other option is to require supervisor override, remote supervisor override or a bypass key each time Auto-ID isn't working. This can become impossible to manage for supervisors who are already under significant time constraints. For both these options, often the root cause goes unresolved, resulting in a gradual decline in system integrity over time.
	Movement Override Fault Report addresses this issue by allowing manual dispense to be enabled, but discouraging it's use unless needed. It does this by:
	- identifying the operator (configurable option - validated, not validated, not required) - identifying the equipment (configurable option - validated, not validated) - requiring the operator to nominate the reason an auto-ID can not be performed
	When movements are sent back to AdaptIQ, they are classified as a new type of movement - "Field fault override". In these movements, the detail of the fault reported by the user is displayed, along with a link to the field fault record.

23.1.1.   Field Fault Reporting - General Fault Reporting

The critical difference between Movement Override and General Fault Reporting is General Fault Reporting can be done at any time (with the addition of a button to the home screen), not just during a manual dispense. This significantly broadens the opportunities to use field fault reporting to provide troubleshooting, gather information from the field.
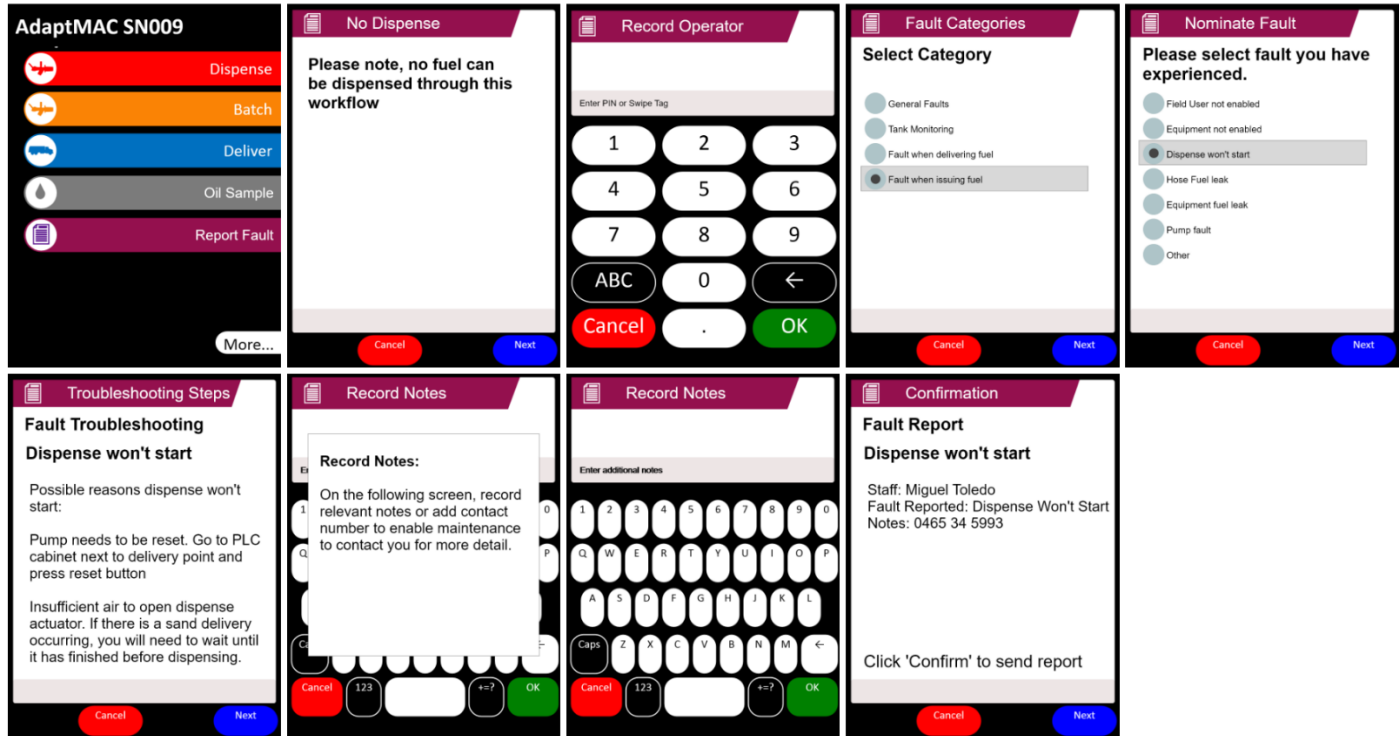
Example 1: Gathering Field Data:

If a staff member or equipment ID is not in the system, they could report this through the AdaptMAC, streamlining the process of identifying staff or equipment who have been missed in AdaptIQ configuration.

Field User ID doesn't work

Category	Dispense Fault
Order Number	1
Displayed For	General, Movement
User Notes Enabled?	✔
User Prompt	Please enter your staff ID here so it can be added to the system

AdaptMAC Groups

Group Name	All
Selected AdaptMACs	All AdaptMACs
Troubleshooting Text	

Example 2: Troubleshooting and Resolving Faults Instantly

Customers frequently report that provisioning is delayed due to staff being unaware of site specific characteristics. General Field Fault Reporting enables custom troubleshooting to be provided for each fault on

each AdaptMAC. In the example below, when a user reports that they are unable to start the pump at Inpit Tank 1, they will see specific instructions, explaining where the emergency stop buttons are and how to reset the PLC. All other AdaptMACs receive the generic instructions.

Pump won't start

Category	Dispense Fault
Order Number	3
Displayed For	General
User Notes Enabled?	✗

AdaptMAC Groups

Group Name	Inpit Tank 1
Selected AdaptMACs	All AdaptMACs
Troubleshooting Text	Things to check: 1) Ensure emergency stops are disengaged. These are found at the south and north end of shed. 2) Reset the PLC - go to the pump shed near storage tank, open the cabinet and press "Reset" button.

Group Name	General Troubleshooting
Selected AdaptMACs	All AdaptMACs
Troubleshooting Text	Things to check: 1) Ensure emergency stops are disengaged

Example 3: Managing Safety and Environmental Risks

General Field Fault Reporting can be used to ensure the required safety equipment is in place and enable users to report risks. For example, a customer reported a scenario where the delivery driver was only unloading at one delivery point and then moving the truck forward to unload the back trailer. When asked why, he said that he'd reported there was no spill kit available at the second delivery point and while he had reported it a number of times, nothing had happened. By enabling field fault reporting, this could have been tracked and managed through AdaptIQ.

Spill kit incomplete

Category	Delivery Fault
Order Number	1
Displayed For	General
User Notes Enabled?	✔
User Prompt	Please indicate what is missing

AdaptMAC Groups

Group Name	All
Selected AdaptMACs	All AdaptMACs
Troubleshooting Text	

Example 4: Managing one-off faults

Tracking and identifying intermittent faults can be especially difficult when issues are reported over a period of time. General Field Fault Reporting can be configured to show a fault on just one AdaptMAC that may be experiencing an issue. This makes it much easier to identify when a fault occurs and after the rectification work has been completed, whether it re-occurs.

Pump cuts out at 1500 litres

Category	Dispense Fault
Order Number	4
Displayed For	General
User Notes Enabled?	✗

AdaptMAC Groups

Group Name	Fuel Point 15 FP15
Selected AdaptMACs	
Troubleshooting Text	This fault is currently being investigated. Restart the transactions to continue fuelling.

Improvements to Field Fault Management

(Update in version 9.4.0)

To improve the usability of the Field Faults feature we have:

- Added field id, equipment id and equipment id status to the /field_faults/events page
- Added field id, equipment id and equipment id status to the CSV export

23.1.2.   Field Fault CSV Export Added (Version 9.0.0)

Field Faults can now be exported to CSV from the Field Fault List Page. This will include the existing headers as well as the Field Notes (to see any tags that were identified in the area) and the associated movement.

Alerts / Field Faults								
Raised At	Category	Type	Description	Cleared At	Equipment ID	Acknowledgement Status	AdaptMAC	Field User

24. Reports

Revision History
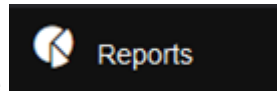
Rev.	Description

24.1. Overview

AdaptIQ features the ability to transfer selected data and information into various reports that are required for running efficient operations. This is important for streamlining the process and eliminating potential errors.

AdaptIQ can generate reports for many different aspects of your site, such as; product usage, tank reconciliation, tank storage levels and many others. In addition, the system allows scheduling reports generation over a period of time and sharing reports with the team.
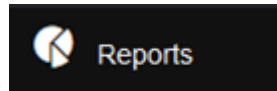
To access the reports functionality, click on the ![Reports] icon located on the left navigation bar. This will bring you to the Report Section of AdaptIQ. This section is organised into two pages: Saved, and Scheduled Reports, which you can navigate between them using the tab control at the top of the page.

The **Saved Reports** page presents a list of the already generated reports, while the **Scheduled Reports** page presents a list of scheduled reports to be generated at a later time specified by the user. The Saved Reports page will be displayed by default.
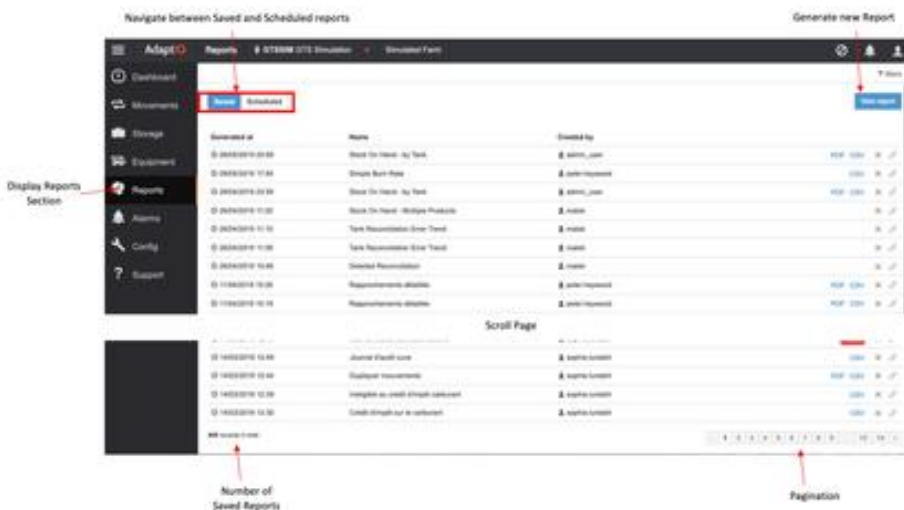
(*Full view of the Reports page*)

24.2. Actions

24.2.1.   Navigate Pages

You can navigate between Saved, and Scheduled reports using the tab control at the top left of the page.

Refer to Saved Reports or Scheduled Reports pages for more details.

24.2.2.   Generating New Report

You can generate a new report by clicking on the New button at top right of the page.

Refer to Generate New Report page for more information.

24.3. List of Available Reports

- Product Reconciliation and Tank Levels Reports

    o   Stock on Hand - By Tank Report
    o   Stock on Hand - By Product Report
    o   Stock on hand-Multiple products Report
    o   Historical Tank Volumes Report
    o   Delivery Transactions Report
    o   Supervisor Override Report
    o   Reconciliation and Rebate Report
    o   Detailed Reconciliation Report
    o   Tank Reconciliation Error Trend Report
    o   Stock Trend Report
    o   Delivery Confirmation Report
    o   Delivery Variance Report

- Product Consumption Reports

    o   Simple Burn Rate Report
    o   Equipment Burn Rate
    o   Multiple Products Usage Grouped Report
    o   Detailed Consumption - by Product Report
    o   Detailed Consumption - by Tank Report
    o   Tank Dispenses by Group and Category Report
    o   Single Product by Group and Category Report
    o   Equipment Service Interval Report
    o   Dispense Breakdown- by Meter

- Financial and Tax Rebates Reports

  - Fuel Tax Credit Report
  - Fuel Tax Credit Ineligible Report

- System Effectiveness

  - Dispensing Transaction Analysis Report
  - Dispensing Transaction Analysis- by Tank

- System Administration Reports

  - Group Changes Audit Log Report
  - Equipment Audit Log Report
  - Field User Audit Log Report
  - Tank Audit Log Report
  - Movement Audit Log Report
  - Authorisation Audit Log Report
  - Field Hardware Audit Log Report
  - User Audit Log Report
  - Field User Access Card Audit Log Report
  - Duplicate Movements Report
  - Group Permission Changes Log Report

25. Scheduled Reports

Revision History

Rev.	Description

25.1. Overview

This page displays reports to be generated later according to a preconfigured schedule. The reports are classified chronologically, with the report to be executed first (at the earliest date) at the top of the list.

25.2. Scheduled Reports List View

Scheduled Reports are sorted by date, and categorized in three sections: THIS WEEK, NEXT WEEK, LATER.

The **Scheduled Reports** list shows the following columns:

(Scheduled Reports - close up of List View)

25.2.1. Headers

(*In order of appearance from left to right*)

Header	Description
Date	Date and time the report will be generated at. It's always the earliest date the report will be generated at if there is more that one occurrence Date is in DD/MM/YYYY HH:MM format.
Name	Displays the name the report was given.

Created by	Displays the user who generated the report.
Delete **X**	• Click on **X** to delete the report schedule, a warning message will be displayed Delete report ✕ Are you sure you want to delete this report and all its associated data? This action cannot be undone. **Delete** • Click on Delete to confirm deletion, the report schedule will be deleted.

25.2.2. Filters

No filters are attached to this page.

List Actions

No actions are attached to this page.

25.3. Report Schedule View Page

Click on a **Scheduled Report** row to open up the **Report Schedule** View page.

Report Schedule

		Generated Reports
Report Type	Stock On Hand - By Product	
Report Name	Stock On Hand - By Product	**Reported Period**
Created By	Demo.Admin	
Recurrence	Every 7 hours	⏱ 10/01/2017 16:15
Output formats	Csv, Pdf, Screen	⏱ 10/01/2017 23:15
Send Email?	No	⏱ 11/01/2017 06:15
Schedule Active	Yes	⏱ 11/01/2017 13:15
		⏱ 11/01/2017 20:15
Delete		⏱ 12/01/2017 03:15

(Report Schedule - close up of View Page)

25.3.1.   Fields

Fields displayed in order of appearance from top to bottom

Field	Description
Report Type	The type of the report to be generated.
Report Name	The name of the report as given by the user.
Created by	Displays the user who generated the report schedule.
Recurrence	The frequency at which the report will be generated.
Output Formats	One or more of the following: CSV: for reports available in CSV format PDF: for reports available in PDF format Screen: for reports displayed On Screen
Schedule Active	Yes: for active schedules No: for inactive schedules

To choose to whom to send this report, click on the following menu:

Recipients

👤 1 recipient (0 groups, 1 user, 0 external emails) ▾

This will open the following window that allows you to share the report with users easily and/or send this report by email (for unregistered people).

In addition to the above fields, a list of previously **Generated Reports** for this schedule will appear to the right. Each row is marked by the reported period which could be in one of two formats:

DD/MM/YYYY HH:MM : If the data collected by this report is collected at a time instance, not over a period of time. i.e. Stock on hand (NOW)

DD/MM/YYYY HH:MM - DD/MM/YYYY HH:MM: If the data collected by this report is collected over a period of time,. i.e. Delivery Variance (over the last month)

A red **Notice** badge will appear next to each report if there is a problem with the report generation i.e. Tanks no more available, or data not found.

Click anywhere on a row to display the report.

Generated Reports
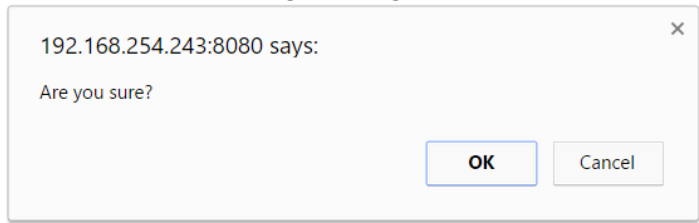
Reported Period

⏱ 02/01/2017 00:00 - 09/01/2017 00:00	Notice
⏱ 02/01/2017 05:00 - 09/01/2017 05:00	Notice
⏱ 02/01/2017 10:00 - 09/01/2017 10:00	Notice
⏱ 02/01/2017 15:00 - 09/01/2017 15:00	Notice
⏱ 02/01/2017 20:00 - 09/01/2017 20:00	Notice
⏱ 03/01/2017 01:00 - 10/01/2017 01:00	Notice
⏱ 03/01/2017 06:00 - 10/01/2017 06:00	Notice
⏱ 03/01/2017 11:00 - 10/01/2017 11:00	Notice
⏱ 03/01/2017 16:00 - 10/01/2017 16:00	Notice

(close up of Generated Reports List)

Actions

Actions in order of appearance from left to right

Action	Description
Delete	Press this action button to delete the report schedule. This will only delete any coming report generation, and change the **Schedule Active** field for this **Report Schedule** to "No" In order to delete a **Report Schedule**: • Press Delete, a warning message will appear; 192.168.254.243:8080 says: Are you sure? OK Cancel • Press cancel to cancel deletion, OK to confirm. • A confirmation message will appear at the top right of AdaptIQ Report Schedule deleted. Deleted reports schedules will not be displayed in the Scheduled Reports list any more. However, you can still access the Report Schedule page from Saved Reports by opening one of the reports created by this schedule, click on Period, and then View all Versions.

26. Generate New Report
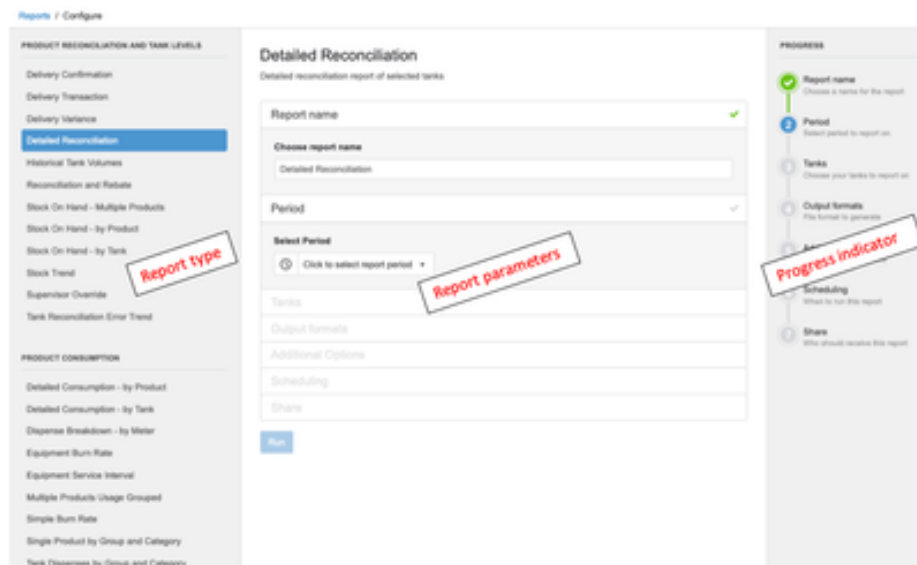
Revision History

Rev.	Description

26.1. Overview

To create a new report, click the **New report** button from the Reports page. The Report configuration page will open to start the Report Configuration Wizard.

The Report Configuration page is divided into three main sections: Report Type, Report Parameters, and Progress Indicator as shown below

(*Report Configuration Page)*

To be able to create reports, you need to have report creation privilege. Otherwise the button will not be displayed in your interface.

26.2. Report Creation Wizard

26.2.1.   Create a new report

- Select a report type from Report Types section, the progress indicator will be updated with the number of steps needed to create this report, with Step ① selected.
- In the parameters section, click on the name of the report at the top of this section, or on the pencil icon to the right of the name to edit the name. This will help you to remember what the report is about. By default, the report will take the same name as the Report Type, unless you edit the report name.

Give this report a name

✎ ?

- Go step by step to configure the parameters in the Parameters section.
- Once you progress with configuring the parameters of one step, the next step will be enabled, and the progress indicator will be updated accordingly until you finish configuring all parameters.

PROGRESS

✓ **Product**
Choose your product

✓ **Tanks**
Choose your tanks to report on

③ **Output formats**
File format to generate

④ **Repetition**
How often to run this report

⑤ **Share**
Who should recieve this report

- At the end, you can either select to run the report immediately or schedule it to be generated later.

26.3. Report Generation Parameters

The report parameters can be categorised into seven main sections, each report contains at least three of this section. The parameters sections for each report appear in the progress indicator while configuring the report. These sections are explained below:

26.3.1.   Period

This section doesn't exist in all reports. It is used to select the time frame for the data to be collected over.

Period ✓

Select Period

🕐 Click to select report period ▾

(Close up of Period parameters)

To select a period:

- Click on **Select Period**, the period selection dialogue box will appear

- Pick a period, a graphical representation for the selected period will be displayed to the right with the duration indicated below.
- Press Close to cancel, or Done to confirm and return to the configuration wizard.

26.3.2. Product(s)

This section doesn't exist in all reports. It is used to select the product(s) to appear in the report.

Some reports require you to select a single product, in this case you can only select one product from a drop down menu that contains the list of products
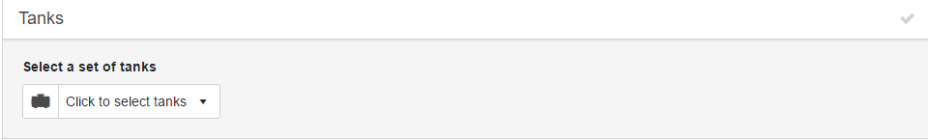
Other reports require you to select multiple products, in this case you can select one or more products from the products check list

26.3.3. Tanks
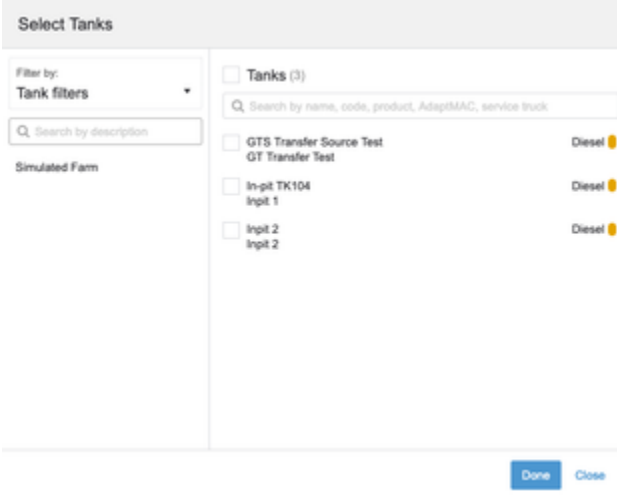
This section doesn't exist in all reports. It is used to select the Tanks to report on.

(Close up of Tanks parameters)

To select a set of Tanks:
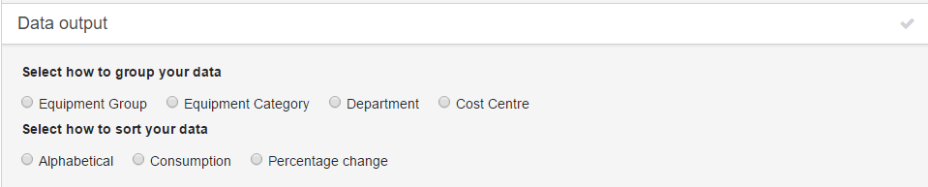
- Click on **Select a set of tanks,** the tank selection dialogue box will appear

- To select Tanks on a specific group, use the **Filter By** drop down menu to select a filter, the relevant groups for the selected filter will be listed in the Tank Categories section, select one or more categories, the Tanks inside the selected categories will be selected
- To select unrelated Tanks, you can pick them one by one from the Tank List to the right, or search by a keyword to limit the list.
- To select all Tanks, press **Select all**, to unselect preselected Tanks press **Unselect all**.
- Press Close to cancel or Done to confirm your selection. This will take you back to the configuration wizard

26.3.4.   Data Output

This section doesn't exist in all reports. It is used to determine how the data will be grouped and sorted in the report.
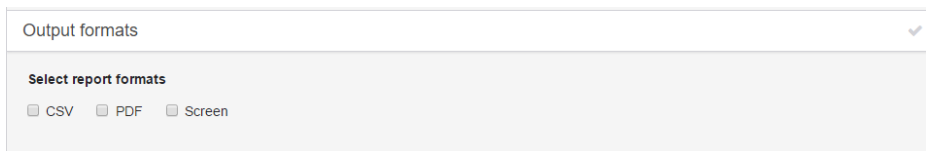
(Close up of Data Output parameters)

This section has two fields

- Select how to group you data. This has two selection sets according to the report to be generated:
    - Equipment Group; Equipment Category; Department; Cost Centre.
    - By Equipment Group then by Category; By Equipment Category then by Group.
- Select how to sort your data. One of the following:
    - Alphabetical
    - Consumption
    - Percentage Change

26.3.5. Output Formats

This section exists in all reports. It is used to determine the output format(s) of the report to be generated
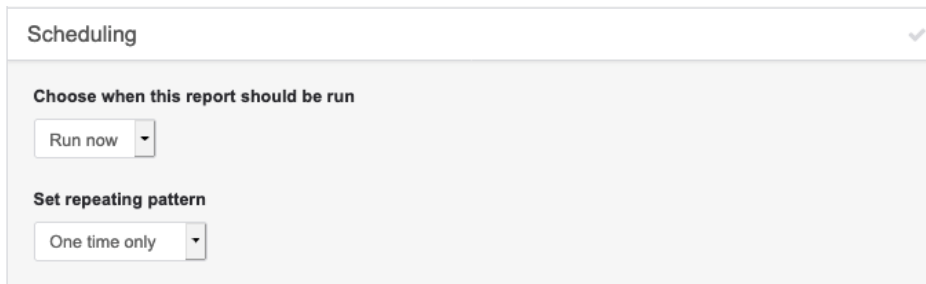
(Close up of Output Formats parameters)

Select one or more of the following formats:

- CSV will generate a CSV file with the reported data.
- PDF is a PDF representation of the report as seen on the screen.
- Screen will allow you to view the report through the web application.

26.3.6. Scheduling

This section exists in all reports. It is used to determine whether the report is recurrent or not, If it is a recurrent report, a Report Schedule will be created.

(Close up of Scheduling parameters)

- Choose **Run Now t**o generate the report as soon as possible. If no other reports are being processed, processing begins immediately. The report list page displays the reports being created at the top of the page.
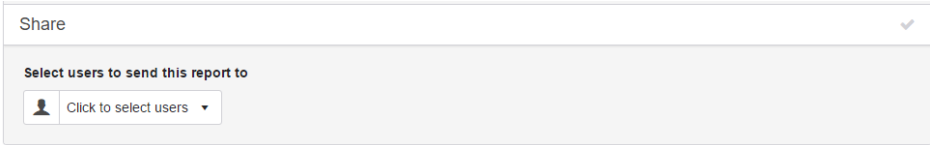
If a report has been configured as a **Run** report which uses data from field hardware that has been out of communication with AdaptIQ, a message will display warning you there could be potentially missing data.

- Choose **Run later** to schedule the subsequent execution of a report: the date and time fields will appear. Use the calendar to select the time at which the report should be executed.
- Choose the model for repeating the report : on time only or any of the available choices on the drop down menu. If you choose to repeat the report a calendar will be created.

Month shifting is not reliable at the end of month, as not all months have the same number of days. This affects both the shifting of months in the **Period** and in the **Repetition** section. For example, a report configured to run monthly on the 31st of January will run on the 28th of February next time.

26.3.7.   Share
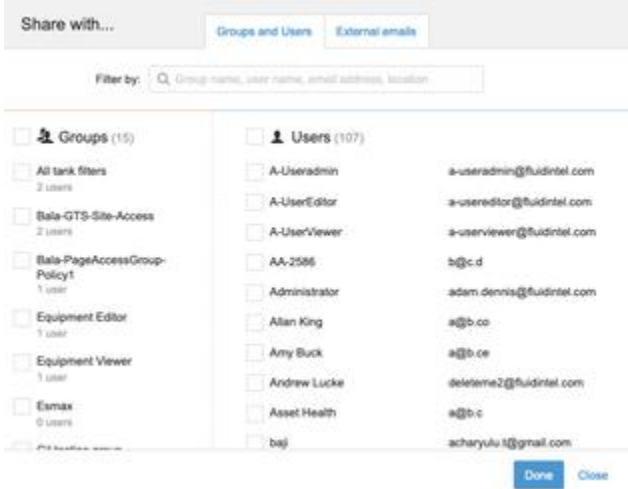
This section exists in all reports. It is used to determine who should receive the report.

(Close up of Share parameters)

To select personnel or groups to share the report with:

- Click on Select users to send this report to, the User Selection dialogue will appear

- To select a User Group, check the checkbox corresponding to the desired User Group(s).
- To select unrelated Users, pick them one by one from the displayed users list, or search by keyword to limit the displayed list for easier selection.

- To add an external email, click on the **External emails tab** and write down the email address you want to add in the textbox.

Share with...

Groups and Users   External emails

Add email address: user@example.com

Done   Close

- Press Close to cancel selection, Done to confirm selection. This will take you back to the report configuration page.

27. Stock on Hand - By Tank Report

Revision History

Rev.	Description

27.1. Overview
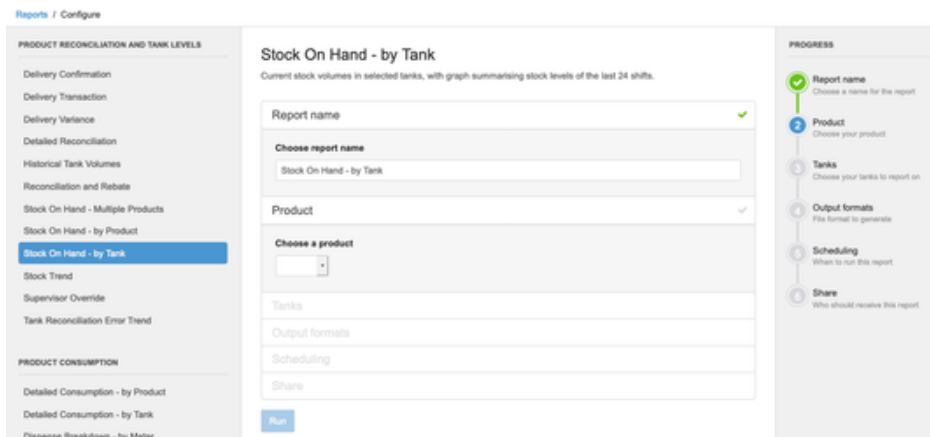
The Stock on Hand - By Tank report allows you to collect data about each selected Tank individually, as well as collating data for a set of selected tanks and produce a summary for these Tanks collectively.

Important data collected by this report

Data collected per selected Tank, Set of selected Tanks

- Current stock
- Summary of the collective stock for the last 24 shifts for a set of Tanks
- Average daily usage based on 30 days period analysis
- Last 24 hours usage

Report Generation

(*Full View of the Stock on Hand - By Tank Report Generation page*)

This report has the following generation parameters:

- Product (single product)
- Tanks
- Output Formats

- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

27.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

27.2.1. Summary of Volumes for Last 24 Shifts

This graph shows the collective stock for the set of selected Tanks in the form of a column chart. The bars represent the last 24 shift, and the samples are taken at the start of each shift. The vertical axis shows Volume in litres while the horizontal axis shows the start date and time of each shift.

(Stock on Hand - By Tank Report - Close up of Summary of Volumes for Last 24 Shifts section)

Actions

- Hover you mouse over a specific bar to display information about this sample

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action

Print chart

Download PNG image
Download JPEG image
Download PDF document
Download SVG vector image
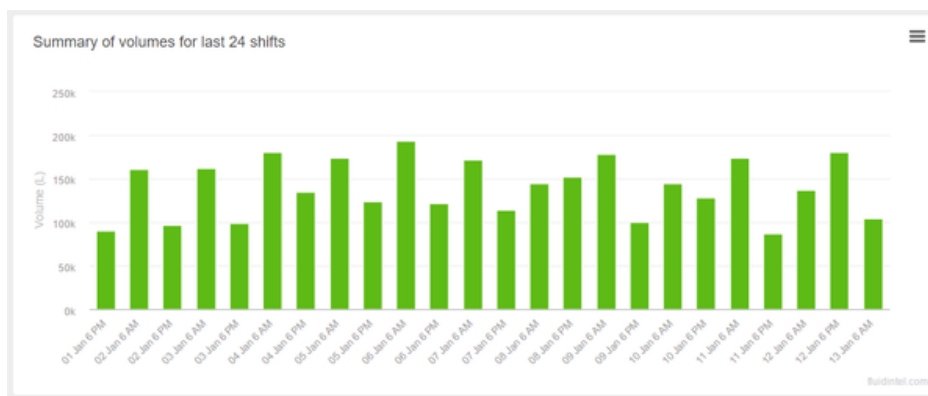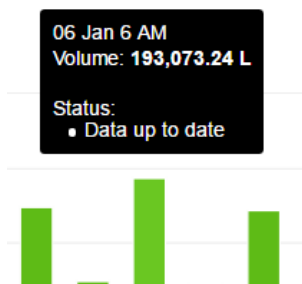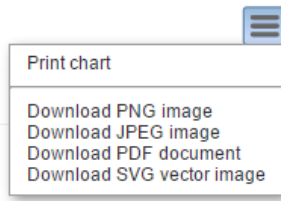
27.2.2. Summary

This section shows the collated data for the set of selected Tanks in numerical format.

Summary

Current Ambient Volume	87,734.31 L		Usage Last 24 hours	253,966.56 L
Safe Fill Level	297,000.00 L		Average Daily Usage Last 30 days	288,431.02 L
Ullage	209,265.69 L		Days Stock Holding	0.3

(Stock on Hand - By Tank Report - Close up of Summary section)

Fields

Field	Description
Current Ambient Volume	The current ambient volume of the set of selected Tanks at the time of report generation in litres
Safe Fill Level	The total safe fill level of the selected Tanks in litres
Ullage	The total ullage of the selected Tanks at the time the report is generated in litres
Usage Last 24 hours	Fuel consumption over the last 24 hours for the set of selected Tanks
Average Daily Usage Last 30 days	The average fuel consumption calculated over the last 30 days period for the set of selected Tanks
Days Stock Holding	**Current Ambient Volume/Average Daily Usage Last 30 days**, rounded to one decimal point. Please see the full description in the next section.

27.2.3. Tank *Name*

This section is repeatable for each selected Tank e.g. if three Tanks are selected, three instances of this section will be displayed in the report. This section focuses on the data per Tank in numerical format.

Tank Inpit 1

Current Ambient Volume	42,754.08 L	Reading Time	13/01/2017 07:53
Reorder	No	Time Since Last Reading	1 hrs
Safe Fill Level	99,000.00 L	Usage Last 24 hours	130,365.84 L
Ullage	56,245.92 L	Average Daily Usage Last 30 days	144,868.49 L
Max Ops	N/A	Days Stock Holding	0.3
Min Ops	N/A		

(Stock on Hand - By Tank Report - Close up of Tank section)

Fields

Field	Description
Current Ambient Volume	The current ambient volume of this Tank at the time the report is generated in Litres
Reorder	Yes: if the **Reorder Alarm** is raise. In other words the Tank volume is under the reorder volume set for this Tank. No: if the **Reorder Alarm** is not raise. In other words the Tank volume is over the reorder volume set for this Tank.
Safe Fill Level	The Safe Fill Level of this Tank in litres
Ullage	The current ullage of this Tank at the time the report is generated in litres
Max Ops	The Max Ops of this Tank as set during Tank configuration
Min Ops	The Min Ops of this Tank as set during Tank configuration
Reading Time	Date and Time of the last reading from this Tank (i.e. last transaction). It is not dependant on the report creation time. This field is in DD/MM/YYY HH:MM format
Time Since Last Reading	The period of time elapsed since last Tank Reading Time(described above) to the report creation date/time in hours

Usage Last 24 hours	Fuel consumption over the last 24 hours from this Tank in litres.
Average Daily Usage Last 30 days	The average fuel consumption calculated over the last 30 days for this Tank
Days Stock Holding	**Current Ambient Volume**/**Average Daily Usage Last 30 days**, rounded to one decimal point. This indicates how long the tank could maintain a non-zero stock without deliveries. e.g. If the Current Ambient Volume=9000L, and the Average Daily Usage=3000L, that means **Days Stock Holding**=3 days. In other words this tank is supposed to be able to run for around 3 days before being dried out, in case of no deliveries. Stock Out situation is just an assumption, and should be totally avoided by monitoring the Level Alarms of the Tank.

27.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

27.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Name	Type	Current Ambient Volume (Diesel)	Current Temp Comp Volume (Diesel)	Temp Comp?	Safe Fill Level	Max Ops	Min Ops	Ullage	Reorder?	Usage 24 hours	Avg Daily Usage Last 30 days	Reading Time	Time Since Last Reading (mins)
2	Summary		87734.31	N/A	FALSE	297000	N/A	N/A	209265.69	N/A	253966.56	288431.02	N/A	N/A
3	Inpit 1	standalone	42754.08	N/A	FALSE	99000			56245.92	No	130365.84	144868.49	01-13 07:53:00	65
4	Inpit 2	standalone	44980.23	N/A	FALSE	198000			153019.77	No	123600.72	143562.53	01-13 07:53:00	65

(Stock on Hand - By Tank - Close up of CSV format)

28. Stock on Hand - By Product Report

Revision History

Rev.	Description

28.1. Overview
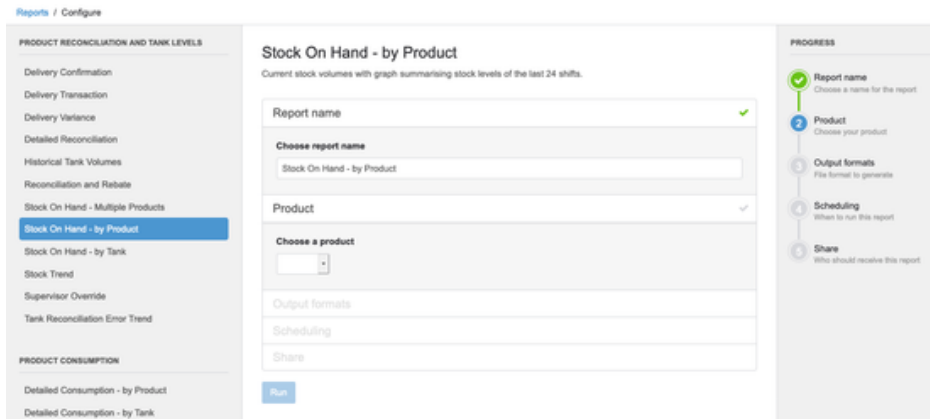
The Stock on Hand - By Product report allows you to collect data about a product in a particular site, as well as collating data for each Tank Group and Tank containing this product

Important data collected by this report

Data collected per Site, Tank Group, Tank

- Current stock.
- Summary of the stock level for the last 24 shifts for the whole site.
- Average daily usage based on 30 days period analysis.
- Last 24 hours usage

Report Generation

(*Full View of the Stock on Hand - By Product Report Generation page*)

This report has the following generation parameters:

- Product (single product)
- Output Formats
- Scheduling

- Share

For more information on how to configure these parameters, please visit Generate New Report page.

28.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

28.2.1. Site Volume for Last 24 Shifts

This graph shows the whole site stock for the selected product in the form of a column chart. The bars represent the last 24 shift, and the samples are taken at the start of each shift. The vertical axis shows Volume in litres while the horizontal axis shows the start date and time of each shift.
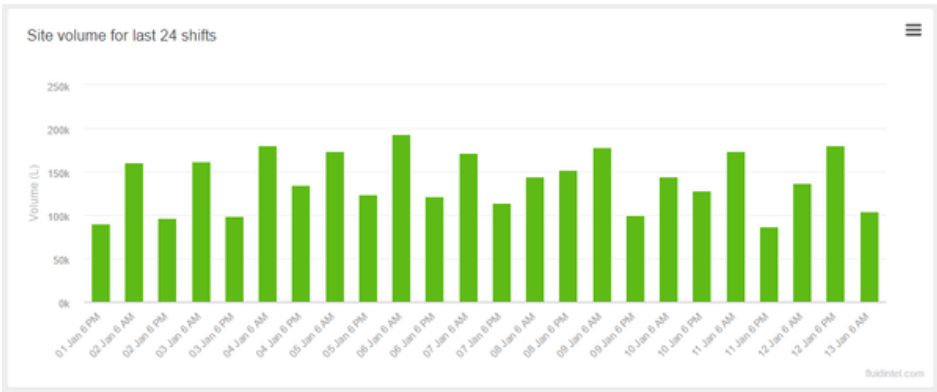
(Stock on Hand - By Product Report - Close up of Summary of Volumes for Last 24 Shifts section)

Actions

- Hover you mouse over a specific bar to display information about this sample
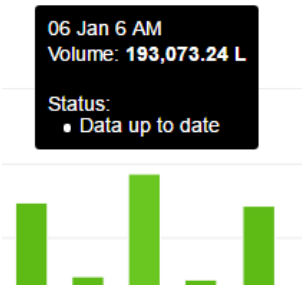
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
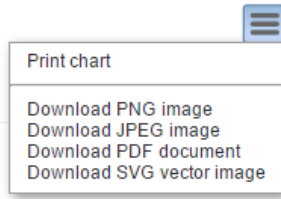
28.2.2. Site *Name*

This section shows the collated data for the selected product all over the site in numerical format.

(Stock on Hand - By product Report - Close up of Site section)

Fields

Field	Description
Current Ambient Volume	The overall current ambient volume of the selected Product in this site at the time of report generation in litres
Safe Fill Level	The total safe fill level of all Tanks holding the selected product in this particular Site in litres
Ullage	The total ullage of all Tanks holding the selected product in this particular Site in litres
Usage Last 24 hours	Fuel consumption over the last 24 hours for the selected product in this particular Site in litres
Average Daily Usage Last 30 days	The average fuel consumption calculated over the last 30 days for the selected product in this particular Site in litres
Days Stock Holding	**Current Ambient Volume/Average Daily Usage Last 30 days**, rounded to one decimal point. Please see the full description in the Tank section below.

28.2.3. Tank Group *Tank Group Name*

This section is repeatable for each Tank Group has one or more Tanks holding the selected product. This section focuses on the data per Tank Group in numerical format.

Tank Group Tank Group

Current Ambient Volume	169,673.27 L	Usage Last 24 hours	299,928.69 L
Safe Fill Level	297,000.00 L	Average Daily Usage Last 30 days	288,781.16 L
Ullage	127,326.73 L	Days Stock Holding	0.6

(Stock on Hand - By Product Report - close up of Tank Group section)

Fields

Field	Description
Current Ambient Volume	The current ambient volume of this Tank Group at the time the report is generated in litres
Safe Fill Level	The total Safe Fill Level of this Tank Group in litres
Ullage	The current ullage of this Tank Group at the time the report is generated in litres
Usage Last 24 hours	Fuel consumption over the last 24 hours from this Tank Group in litres.
Average Daily Usage Last 30 days	The average fuel consumption calculated over the last 30 days period for this Tank Group
Days Stock Holding	**Current Ambient Volume/Average Daily Usage Last 30 days**, rounded to one decimal point. Please see the full description in the Tank section below.

28.2.4.

Tank *Name*

This section is repeatable for each Tank holding the selected product. This section focuses on the data per Tank in numerical format.

Tank Inpit 1

Current Ambient Volume	42,689.68 L	Reading Time	13/01/2017 13:20
Reorder	No	Time Since Last Reading	1 hrs
Safe Fill Level	99,000.00 L	Usage Last 24 hours	145,509.68 L
Ullage	56,310.32 L	Average Daily Usage Last 30 days	144,793.61 L
Max Ops	N/A		
Min Ops	N/A	Days Stock Holding	0.3

(Stock on Hand - By Product Report - close up of Tank section)

Fields

Field	Description
Current Ambient Volume	The current ambient volume of this Tank at the time the report is generated in litres
Reorder	Yes: if the **Reorder Alarm** is raise. In other words the Tank volume is under the reorder volume set for this Tank. No: if the **Reorder Alarm** is not raise. In other words the Tank volume is over the reorder volume set for this Tank.
Safe Fill Level	The Safe Fill Level of this Tank in litres
Ullage	The current ullage of this Tank at the time the report is generated in litres
Max Ops	The Max Ops of this Tank as set during Tank configuration
Min Ops	The Min Ops of this Tank as set during Tank configuration
Reading Time	Date and Time of the last reading from this Tank (i.e. last transaction). It is not dependant on the report creation date/time. This field is in DD/MM/YYY HH:MM format
Time Since Last Reading	The period of time elapsed since last Tank Reading Time(described above) to the report creation time in hours
Usage Last 24 hours	Fuel consumption over the last 24 hours from this Tank in litres.

Average Daily Usage Last 30 days	The average fuel consumption calculated over the last 30 days period for this Tank
Days Stock Holding	**Current Ambient Volume/Average Daily Usage Last 30 days**, rounded to one decimal point. This indicates how long the tank could maintain a non-zero stock without deliveries. e.g. If the Current Ambient Volume=9000L, and the Average Daily Usage=3000L, that means **Days Stock Holding**=3 days. In other words this tank is supposed to be able to run for around 3 days before being dried out, in case of no deliveries. Stock Out situation is just an assumption and should be totally avoided by monitoring the Level Alarms of the Tank.

28.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

28.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Name	Current Ambient Volume (Diesel)	Current Temp Comp Volume (Diesel)	Temp Comp?	Safe Fill Level	Max Ops	Min Ops	Ullage	Reorder?	Usage 24 hours	Avg Daily Usage Last 30 days	Reading Time	Time Since Last Read(mins)
2	GTS Simulation	169673.27	N/A	FALSE	297000	N/A	N/A	127326.73	N/A	299928.69	288781.16	N/A	N/A
3	Tank Group	169673.27	N/A	FALSE	297000	N/A	N/A	127326.73	N/A	299928.69	288781.16	N/A	N/A
4	Inpit 1	42689.68	N/A	FALSE	99000			56310.32	No	145509.68	144793.61	2017-01-13 13:20:00 +1100	65
5	Inpit 2	126983.59	N/A	FALSE	198000			71016.41	No	154419.01	143987.55	2017-01-13 13:20:00 +1100	65

(Stock on Hand - By Product Report - close up of CSV format)

29.   Stock on hand-Multiple products Report

Revision History

Rev.	Description
	Before you start
	You need to know about Tanks in AdaptIQ.

29.1.   Overview

This report allows you to obtain volume data for one or more products for the tanks selected for the last 24 shifts.

Important data collected by this report

Data collected by product and tank.

- Current stock
- Summary of product volumes over the last 24 shifts
- Last 24 hours usage
- Days stock holding

Report Generation

(*Full View of the Stock on Hand - Multiple Products Report Generation page*)

This report has the following generation parameters:

- Tanks
- Output Formats

- Additional Options
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

29.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

Report Summary table

Tank Name	Product	Time Since Last Reading	Latest Volume	Ullage	SFL	Volume Alarm
Inpit 1	Diesel	1 mins	65,351.20 L	33,648.80 L	99,000.00 L	
Inpit 2	Diesel	1 mins	106,348.22 L	91,651.78 L	198,000.00 L	
Main Fuel Farm	Diesel	1 mins	2,149,738.84 L	370,261.16 L	2,520,000.00 L	
Service Truck 001 – Tank 22	Oil	8760 hrs			1,000.00 L	

Headers	Description
Tank Name	Tank names, which are clickable links
Product	Products, which are clickable links
Time Since Last Reading	Time in hours since last reading
Latest Volume	Last volume read in litres
Ullage	Volume available
SFL	Safety Fill Level
Volume Alarm	If a volume-related alarm exists for this tank it will be displayed here, as a clickable link

Product volume for the last 24 shifts (optional)

Diesel Summary ▴

Summary of Diesel volumes for the last 24 shifts
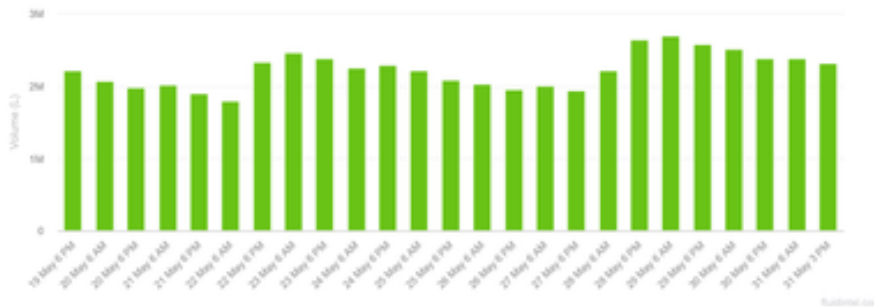
Current Ambient Volume	2,321,438.26 L		Usage Last 24 hours	308,366.03 L
Safe Fill Level	2,817,000.00 L		Average Daily Usage Last 30 days	281,148.75 L
Ullage	495,561.74 L		Days Stock Holding	8.3

This graph shows the volumes for a given product for all selected tanks. The bars represent the last 24 shifts, the vertical axis indicates the volume in litres, while the horizontal axis indicates the start date and time of each shift.

Field	Description
Current Ambient Volume	Overall ambient volume of the selected product at the time of generation of the ratio in litres for the selected tanks
Safe Fill Level	The total safe fill level of the selected Tanks in litres
Ullage	The total ullage of the selected Tanks at the time the report is generated in litres
Usage last 24 hours	Fuel consumption over the last 24 hours for the set of selected Tanks
Average daily usage last 30 days	The average fuel consumption calculated over the last 30 days period for the set of selected Tanks
Days stock holding	**Current Ambient Volume/Average Daily Usage Last 30 days**, rounded to one decimal point. Please see the full description in the next section.

Note: The blue arrow next to the product name allows you to go directly to its location in the table at the top of the page.

Tank section (optional)

Tank Inpit 1 - Diesel ▴

Summary of Inpit 1 volumes for the last 24 shifts
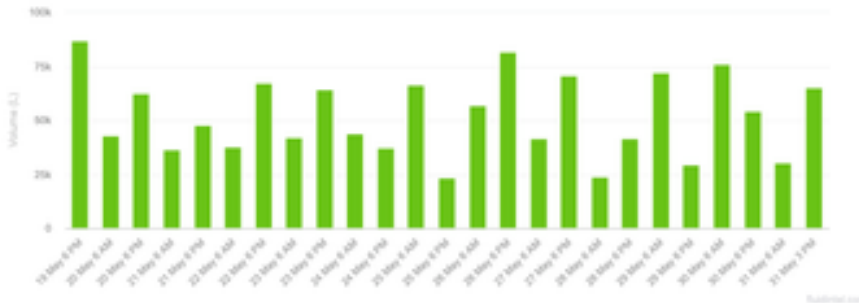
Current Ambient Volume	65,351.20 L	Reading Time	31/05/2019 15:04
Reorder	No	Time Since Last Reading	1 mins
Safe Fill Level	99,000.00 L	Usage Last 24 hours	77,687.72 L
Ullage	33,648.80 L	Average Daily Usage Last 30 days	79,315.37 L
Max Ops	80,000.00 L	Days Stock Holding	0.8
Min Ops	20,000.00 L		

Field	Description
Current Ambient Volume	The current ambient volume of this Tank at the time the report is generated in Litres
Reorder	Yes: if the **Reorder Alarm** is raise. In other words the Tank volume is under the reorder volume set for this Tank.

No: if the **Reorder Alarm** is not raise. In other words the Tank volume is over the reorder volume set for this Tank. |
Safe Fill Level	The Safe Fill Level of this Tank in litres
Ullage	The current ullage of this Tank at the time the report is generated in litres
Max Ops	The Max Ops of this Tank as set during Tank configuration
Min Ops	The Min Ops of this Tank as set during Tank configuration
Reading Time	Date and Time of the last reading from this Tank (i.e. last transaction). It is not dependant on the report creation time.

This field is in DD/MM/YYY HH:MM format |
| Time Since Last Reading | The period of time elapsed since last Tank Reading Time(described above) to the report creation date/time in hours |
| Usage Last 24 hours | Fuel consumption over the last 24 hours from this Tank in litres. |

Average Daily Usage Last 30 days	The average fuel consumption calculated over the last 30 days for this Tank
Days Stock Holding	**Current Ambient Volume/Average Daily Usage Last 30 days**, rounded to one decimal point. This indicates how long the tank could maintain a non-zero stock without deliveries. e.g. If the Current Ambient Volume=9000L, and the Average Daily Usage=3000L, that means **Days Stock Holding**=3 days. In other words this tank is supposed to be able to run for around 3 days before being dried out, in case of no deliveries.

Actions

- Hover you mouse over a specific bar to display information about this sample
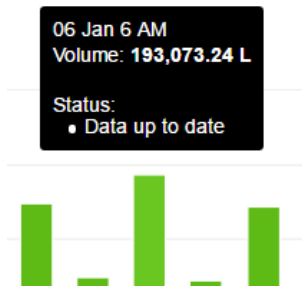
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
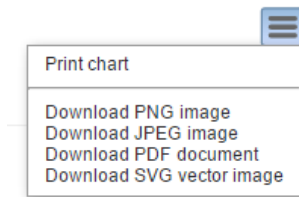
29.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

29.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	Name	Type	Current Ambient Volume (Diesel)	Current Temp Comp Volume (Diesel)	Temp Comp?	Safe Fill Level	Max Ops	Min Ops	Ullage	Reorder?	Usage 24 hours	Avg Daily Usage Last 30 days	Reading Time	Time Since Last Reading (mins)
2	Summary		87734.31	N/A	FALSE	297000	N/A	N/A	209265.69	N/A	253966.56	288431.02	N/A	N/A
3	Inpit 1	standalone	42754.08	N/A	FALSE	99000			56245.92	No	130365.84	144868.49	01-13 07:53:00	65
4	Inpit 2	standalone	44980.23	N/A	FALSE	198000			153019.77	No	123600.72	143562.53	01-13 07:53:00	65

(Stock on Hand - Multiple products - Close up of CSV format)

30.   Historical Tank Volumes Report

Revision History

Rev.	Description
	Before you start
	You need to know about Tanks in AdaptIQ. Please visit this page for more information "Tank Details"

30.1.   Overview

The Historical Tank Volumes report allows you to have detailed view of Tank Volumes over a period of time.

Important data collected by this report

Data collected per selected Tank

- Tank volume every minute over a period of Time

Report Generation

(*Full View of Historical Tank Volumes - Report Generation page*)

This report has the following generation parameters:

- Period

- Tanks
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

30.2. Report On Screen View / Report Data

This report doesn't have On Screen View

30.3. Report PDF Format

This report doesn't have PDF format

30.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E
1	Time	Tank	Volume	Volume Type	Entered By
2	1/12/2016 0:00	Inpit 1	49,821.33	Ambient	
3	1/12/2016 0:00	Inpit 2	95,664.34	Ambient	
4	1/12/2016 0:01	Inpit 1	49,514.15	Ambient	
5	1/12/2016 0:01	Inpit 2	95,601.00	Ambient	
6	1/12/2016 0:02	Inpit 1	49,788.69	Ambient	
7	1/12/2016 0:02	Inpit 2	96,272.93	Ambient	
8	1/12/2016 0:03	Inpit 1	49,602.82	Ambient	
9	1/12/2016 0:03	Inpit 2	96,787.29	Ambient	
10	1/12/2016 0:04	Inpit 1	49,602.62	Ambient	
11	1/12/2016 0:04	Inpit 2	97,025.93	Ambient	

(Historical Tanks Volumes Report - close up of CSV format)

Headers

Header	Description
Time	Date/Time of this record This field is in DD/MM/YYY HH:MM format
Tank	The Tank the Volume is recorded for
Volume	The tank volume at this specific time in litres
Volume Type	The type of the Volume of this record
Entered By	The name of the user recorded this Volume, if manually entered.

31.   Delivery Transactions Report

Revision History

Rev.	Description
	Before you start
	You need to know about Deliveries and Delivery Dockets
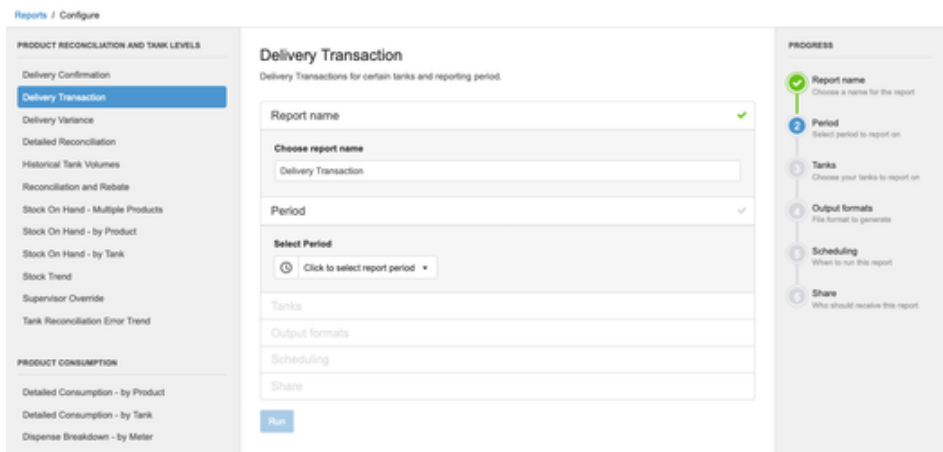
31.1.   Overview

The Delivery Transactions report allows you to collect data about deliveries to selected Tanks over a period of time.

Important data collected by this report

- Total delivery volume to a set of selected Tanks over a selected period of time.
- Total confirmed and unconfirmed volumes delivered to a set of selected Tanks over a selected period of time.
- Total docketed volumes delivered to a set of selected Tanks over a selected period of time.
- Detailed delivery records for the selected Tanks.

Report Generation

(*Full View of the Delivery Transactions Report Generation page*)

This report has the following generation parameters:

- Period
- Tanks
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

31.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

31.2.1.   Summary

This section shows the collated delivery data for all selected Tanks in a table format, and categorised by product.

Summary				
Product	Total Confirmed	Total Unconfirmed	Total docketed	Total Undocketed
Diesel	377,060.56 L	1,577,808.68 L	224,796.52 L	1,730,072.72 L

(Delivery Transactions Report - Close up of Summary section)

Headers

Header	Description
Product	The product the data of this record represents
Total Confirmed	Total volume of confirmed deliveries for this product to the set of selected Tanks in litres
Total Unconfirmed	Total volume of unconfirmed deliveries for this product to the set of selected Tank in litres
Total Docketed	Total volume of deliveries with attached delivery dockets for this product to the set of selected Tank in litres
Total Undocketed	Total volume of deliveries without attached delivery dockets for this product to the set of selected Tank in litres

31.2.2. Delivery Transactions

This section shows the delivery records for the selected Tanks in a table format. The table is partitioned by Product.

Delivery Transactions

Diesel

Date	Delivery to	Docket	Supplier	Confirmed	Type	Volume
09/01/2017 01:37	Inpit 1			No	Gauged	73,167.38 L
09/01/2017 15:54	Inpit 1			No	Gauged	78,993.06 L
09/01/2017 17:34	Inpit 2	DD001	Hydrocarbon Supplier	Yes	Gauged	137,711.99 L
10/01/2017 04:43	Inpit 1			Yes	Gauged	73,683.15 L
10/01/2017 15:58	Inpit 1			Yes	Gauged	78,580.89 L
10/01/2017 16:29	Inpit 2			No	Gauged	142,412.62 L
11/01/2017 03:46	Inpit 1			No	Gauged	86,427.57 L

(Delivery Transactions Report - close up of Delivery Transactions section)

Headers

Header	Description
Date	Date of the record in DD/MM/YYYY HH:MM format
Delivery To	The Tank received this delivery
Docket	The docket number, if the delivery has an attached Delivery Docket entry.
Supplier	The supplier who made the delivery
Confirmed	Yes: if the delivery is confirmed No: if the delivery is not confirmed
Type	Type of the transaction i.e. Gauged
Volume	Delivered volume in litres

31.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

31.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	Product	Collected At	Tank	Docket Number	Supplier	Confirmed	Type	Volume
2	Diesel	9/1/2017 1:37	Inpit 1			No	Gauged	73,167.38
3	Diesel	9/1/2017 15:54	Inpit 1			No	Gauged	78,993.06
4	Diesel	9/1/2017 17:34	Inpit 2	DD001	Hydrocarbon Supplier	Yes	Gauged	137,711.99
5	Diesel	10/1/2017 4:43	Inpit 1			Yes	Gauged	73,683.15
6	Diesel	10/1/2017 15:58	Inpit 1			Yes	Gauged	78,580.89
7	Diesel	10/1/2017 16:29	Inpit 2			No	Gauged	142,412.62
8	Diesel	11/1/2017 3:46	Inpit 1			No	Gauged	86,427.57
9	Diesel	11/1/2017 16:52	Inpit 2			No	Gauged	107,847.41
10	Diesel	11/1/2017 17:24	Inpit 1			No	Gauged	59,259.90
11	Diesel	12/1/2017 2:45	Inpit 1			No	Gauged	64,130.15

(Delivery Transactions Report - close up of CSV format)

32. **Supervisor Override Report**

Revision History

Rev.	Description
	Before you start
	You need to know about Supervisor Override Challenge in AdaptIQ

32.1. **Overview**

The Supervisor Override report allows you to collect data about Supervisor Override dispenses happened over a period of time. Currently AdaptFMS supports two methods of Supervisor Override, it's important to know about them to understand this report:

32.1.1. **Supervisor Override**

This is a PIN based method issued and authorised by a Field user with adequate privilege. AdaptIQ doesn't interact to this request in any way, it just collect the data of the transaction as any normal dispense and categorise it as of a Supervisor Override type. More details about this feature could be found in AdaptMAC User Guide.

32.1.2. **Remote Supervisor Override**

Named as Supervisor Override Challenge in AdaptIQ. This method requires interaction between the Field Hardware(AdaptMAC in this case) and AdaptIQ, as the Field Hardware issues the request and AdaptIQ approves it. The detailed process is explained in Supervisor Override Challenge page of this User Guide.

Important data collected by this report

- List of PIN Based Supervisor Override transaction over a period of time.
- List of Supervisor Override Challenges categorised as Used and Unused over a period of time.

Report Generation

(*Full View of the Supervisor Override Report Generation page*)

This report has the following generation parameters:

- Period
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

32.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

32.2.1. Supervisor Override

This section shows the Supervisor Override records in a table format. The table is partitioned by the type of "Supervisor Override".

(Supervisor Override Report - Close up of Supervisor Override section)

PIN Based Headers

This table partition is used to list all the PIN Based Supervisor Override over a period of time.

Header	Description
Collected At	Start date and time of the transaction Transaction date is in DD/MM/YYYY HH:MM:SS format.
Field Hardware	AdaptMAC/AdaptMCU which is responsible for this transaction
Tank	The Tank the fuel dispensed from
Meter	The meter attached to this transaction
Volume	The dispensed volume in litres
Product	The dispensed product i.e. Diesel
Reason	The reason the Supervisor Override is used for. This field is mandatory in case there is no Equipment ID

Used Supervisor Override Challenges Headers

This table partition is used to list all used Supervisor Override Challenge codes over a period of time (The codes are already used to make a dispense)

This partition has the same headers as above, in addition to the following:

Header	Description

Authorised By	AdaptIQ user who authorised the challenge code
Equipment Item	The equipment the dispense is made to. • Sometimes the dispense is for an authorised equipment with faulty tag. In this case, the equipment will not be authorised automatically by detecting its tag, so the Supervisor Override Challenge is used, and the Equipment ID could be picked up from the database. • In the case the Equipment ID is known, the reason field is optional.

Unused Supervisor Override Challenges Headers

This table partition is used to list all Unused Supervisor Override Challenge codes over a period of time (The codes have been issued, but not used to make a dispense)

This partition shares these headers as described above:

• Field Hardware
• Authorised By
• Equipment Item
• Reason

32.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

32.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.
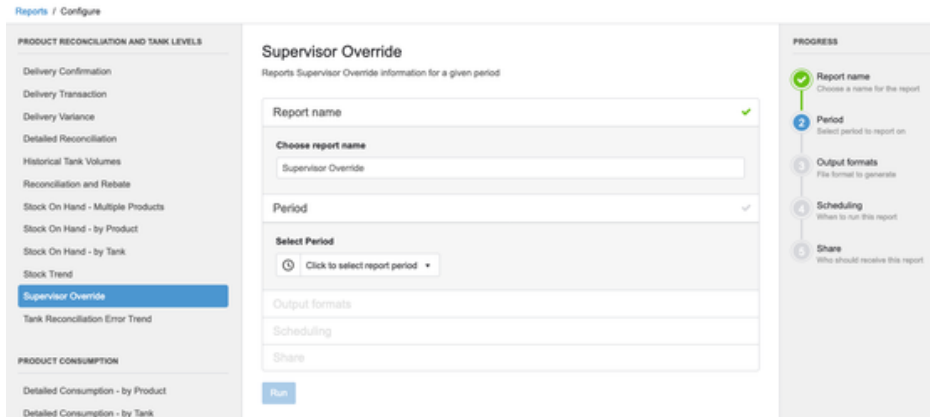
	A	B	C	D	E	F	G	H	I	J	K
1	Type	Has movement data	Collected at	From tank	Volume	Product	Equipment item	Reason	Field hardware	Meter	Authorised by
2	Challenge	No						test	mcu_2		Demo.Admin

Supervisor Override Report - close up of CSV format)

33. Detailed Reconciliation Report

Revision History

Rev.	Description
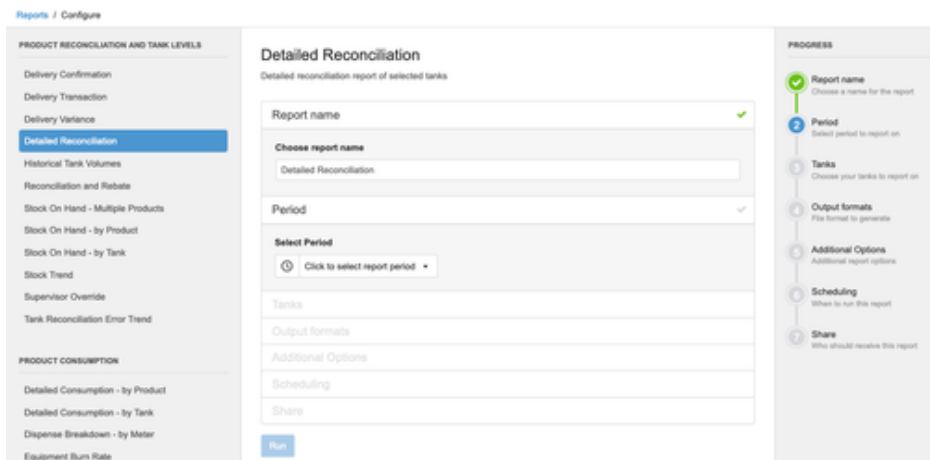
33.1. Overview

This report is used to confirm that the data captured from the gauges matches the data recorded by the flow meters. The net changes in volumes are therefore compared over a given period and should not differ by more than a small configurable percentage corresponding to experimental errors.

Important data collected by this report

- Tank volumes for all selected tanks at the beginning and end of the reporting period
- All transactions from or to the selected tanks over this period
- Daily reconciliation error for each tank
- Total reconciliation error for each tank over the period

Report generation

(*Full View of the Detailed Reconciliation Report Generation page*)

This report has the following generation parameters:

- Period
- Tanks
- Output Formats
- Scheduling

- Share

For more information on how to configure these parameters, please visit Generate New Report page.

33.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

33.2.1. Product summary

Product Summary

Error as % of outflow	Product	Opening Stock	Closing Stock	Inflow	Outflow	Error
▲ 0.17%	Diesel	154,895.62 L	127,492.96 L	8,074,276.27 L	8,115,483.64 L	13,804.71 L

This table presents the report data by product.

33.2.2. Tank summary

Tank Summary

Error as % of outflow	KPI (+/-)	Tank	Opening Stock	Closing Stock	Inflow	Outflow	Error
▲ 0.50%	1.00%	Inpit 2	122,226.61 L	71,104.11 L	4,102,839.87 L	4,174,718.68 L	20,756.31 L
▼ -0.18%	1.00%	In-pit TK104	32,669.01 L	56,388.85 L	3,971,436.40 L	3,940,764.96 L	-6,951.60 L
N/A	N/A	GTS Transfer Source Test			0.00 L	0.00 L	
N/A	N/A	Other Product			0.00 L	0.00 L	

This table presents the data for each tank covered by the report. The reconciliation error (variance) is calculated per day for each tank and also for each tank for the entire period. Errors are displayed in descending order. The KPI is an objective defined in the tank details page for each tank. Note: for virtual tanks the KPI is defined on the parent tank.

Below these tables there is a set of repeatable graphs for each tank.

33.2.3. Summary and reconciliation graph

This first graph shows in detail the data presented in the summary table of the tanks. Some values have an arrow next to them. A red arrow pointing down indicates a negative value, while a green arrow pointing up indicates a positive value.

The histogram on the right shows the volume variations. The measured stored volume is in yellow, the inflows in green and the outputs in red, the error in blue.
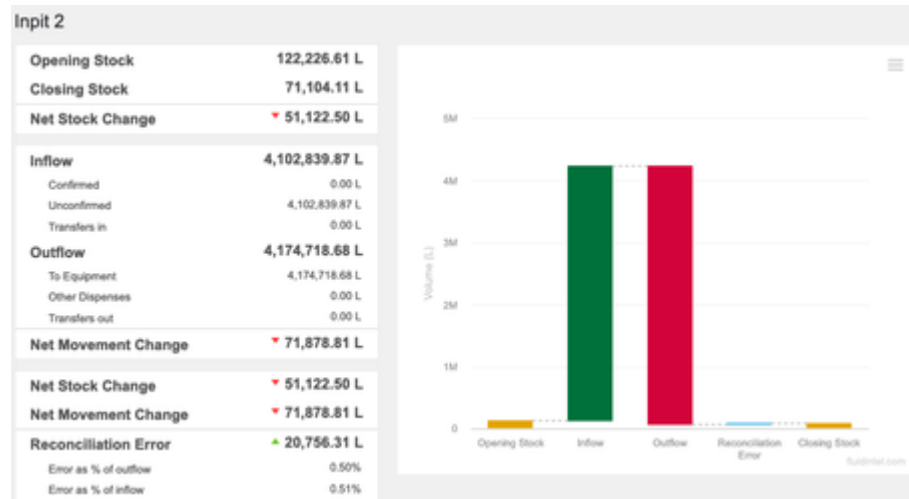
Headers	Description
Opening stock	The total volume in litres of the selected tanks, measured at the start date/time of the report
Closing stock	The total volume in litres of the selected tanks, measured at the end date/time of the report.
Net stock change	= opening stock - closing stock
Inflow	Total entries over the reporting period in litres
Inflow confirmed	Total volume of confirmed inflows over the reporting period in litres
Inflow unconfirmed	Total volume of unconfirmed inflows over the reporting period in litres
Inflow transfers in	Volume transferred to this tank for the reporting period
Outflow to equipment	Total dispenses to equipment items over the period of the report in litres. This calculated for from the dispenses where Equipment ID field exists.
Outflow other dispenses	Total dispenses where no equipment is selected over the period of the report in litres. This calculated from the dispenses where Equipment ID field doesn't exist.
Outflow transfers out	Volume transferred from this tank for the reporting period
Net movement change	= Outflow-Inflow

Reconciliation error	The reconciliation error is calculated by subtracting the net stock change (measured volumes) and the net movement change@ (calculated volume)
Reconciliation error as % of outflow	Reconciliation Error as a percentage of the total metered outflow from the selected tanks
Reconciliation error as % of inflow	Reconciliation Error as a percentage of the total metered inflow from the selected tanks

The following two graphs show the daily reconciliations in volumes and percentage of outputs.
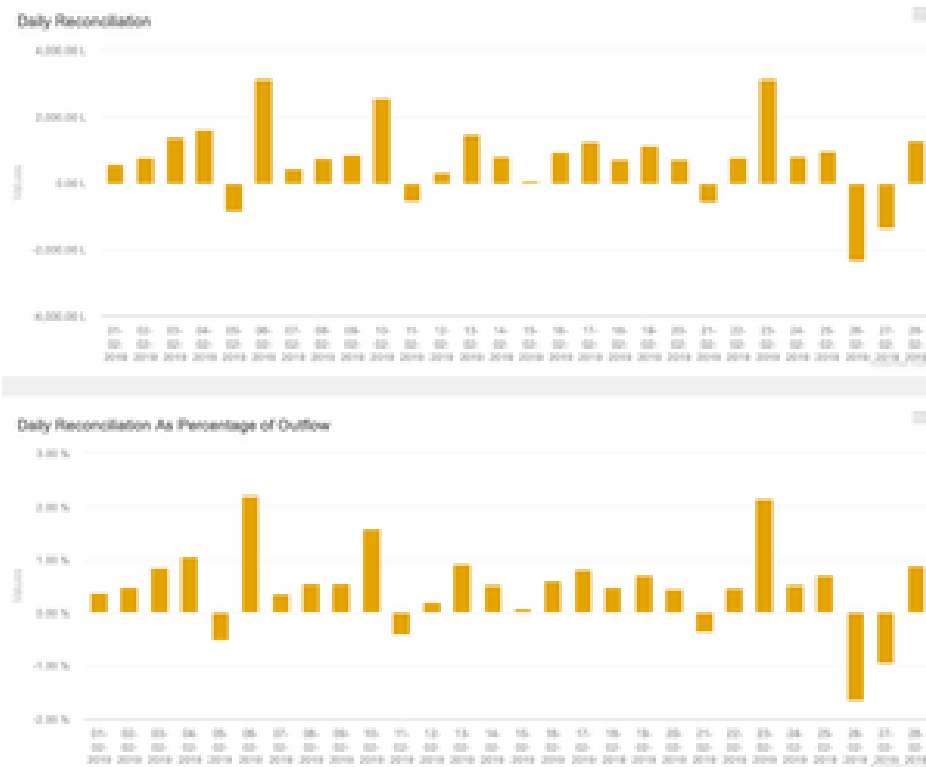
33.2.4. Actions

- Hover you mouse over a specific bar to display information about this sample.
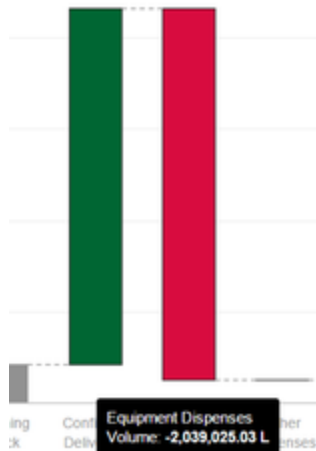
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
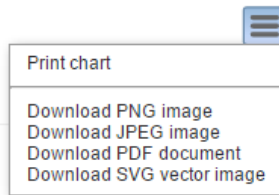
33.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

33.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly. Only three rows are included from the same type as an example.

	A	B	C	D	E
1	RECONCILIATION AND REBATE	GTS Simulation	Dated from 16/01/2017 00:00 to 23/01/2017 00:00		
2	Confirmed Deliveries				
3	Inpit 1	77,540.95 L	16/01/2017 06:35		
4	Inpit 2	122,332.26 L	16/01/2017 04:22		
5	Inpit 3	54,405.18 L	16/01/2017 18:25		
6	Unconfirmed Deliveries				
7	Transfers				
8	DISPENSING TRANSACTIONS PER EQUIPMENT ITEM				
9	Dozer 000	Downer	390.5	11,715.03	10,873.36
10	Dozer 001	Downer	83.81	12,279.03	9,843.90
11	Dozer 002	Mining	85.46	13,650.60	10,267.65
12	Dozer 003	Mining	66.44	11,284.43	10,039.48
13	Dozer 004	Mining	0	9,764.04	9,672.10
14	DISPENSING TRANSACTIONS PER EQUIPMENT GROUP				
15		Downer	7,402.67	764,640.23	659,732.32
16		Mining	1,056.19	437,352.62	374,187.14
17		Prestrip	5,959.15	1,169,982.77	996,860.82
18	TOTAL DISPENSING TO EQUIPMENT		14,418.01	14,418.01	2,030,780.28
19		Automatic	14,418.01	2,371,975.61	2,030,780.28
20	OTHER DISPENSING MOVEMENTS				0
21	TRANSFERS TO OTHER TANKS				0
22	TOTAL DELIVERIES - CONFIRMED				2,003,795.03
23	TOTAL DELIVERIES - OTHER				0
24	TOTAL RECONCILIATION ADJUSTMENTS				8,826.95
25	CONFIRMED DELIVERIES LESS DISPENSES				-26,985.25
26	OPENING STOCK LEVEL - MONITORED TANKS				121,101.83
27	CLOSING STOCK LEVEL - MONITORED TANKS				98,910.98
28	CLOSING STOCK LESS OPENING STOCK				-22,190.83
29	RECONCILIATION DISCREPANCY - LITRES				-4,794.42

(Detailed Reconciliation Report - Close up of CSV format)

34. Tank Reconciliation Error Trend Report

Revision History

Rev.	Description
	Before you start

You need to know about Storage in AdaptIQ.
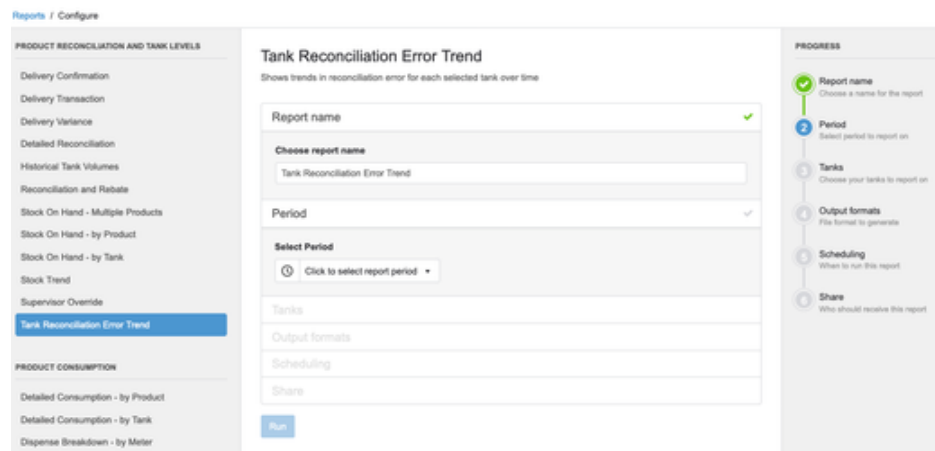
34.1. Overview

The Reconciliation and Rebate report allows you to calculate the reconciliation error for each selected tank over a period of time.

Important data collected by this report

- Delta Reconciliation Error over a one sample period.
- Accumulated Reconciliation Error.
- Rolling average Reconciliation Error, using the last 10 samples.

Report Generation

(Tank Reconciliation Error Trend *Report Generation page*)

This report has the following generation parameters:

- Period

- Tanks
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

34.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

34.2.1.   Tank Reconciliation Error Trend Graph

- This graph shows the reconciliation error for a specific tank over a period of time. The y axis represents the reconciliation error as a percentage of the total SFL of the Tank, while the x axis shows the dates the samples are taken.
- This graph is repeatable per Tank.
- This graph plots 3 charts as follows:
    o   Delta: The reconciliation error, calculated over a one sample period (i.e. If we take a sample every 1.5 hours, the delta at 3:00pm is the reconciliation error occurred from 1:30pm to 3:00pm) . Represented by a column chart.
    o   Accumulated: The accumulated reconciliation error, calculated by adding up the delta values since the start of the chart up to the point the sample is taken. Represented by a line chart.
    o   Rolling Average (10 Samples): The reconciliation error average calculated using the last 10 accumulated values. Represented by a point chart.
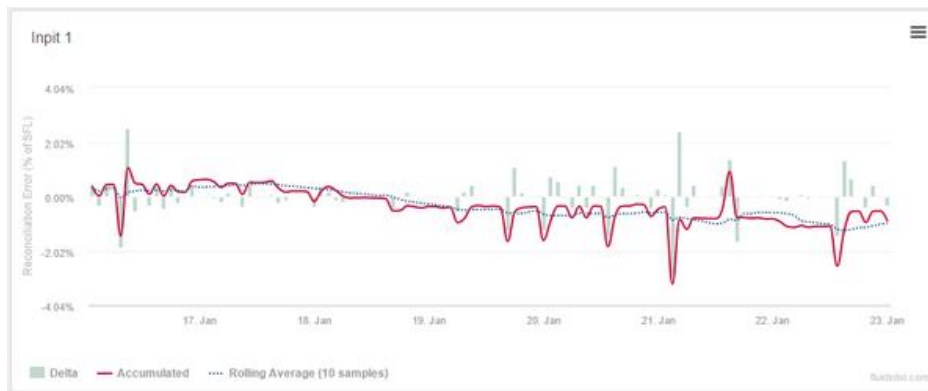
(Tank Reconciliation Error Trend Report - Close up of Tank Reconciliation Error Trend *Graph)*

Actions

- Hover you mouse over a specific point to display information about this sample.

:
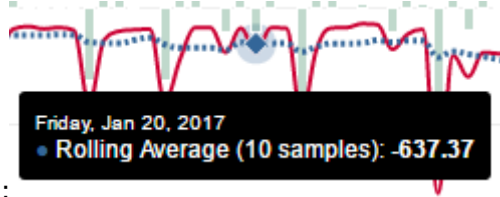
- Click on any of the chart names (Delta, Accumulated, Rolling Average) to show/hide it

- Select a part of the chart to zoom in. Press the [Reset zoom] button to return back to the normal size.
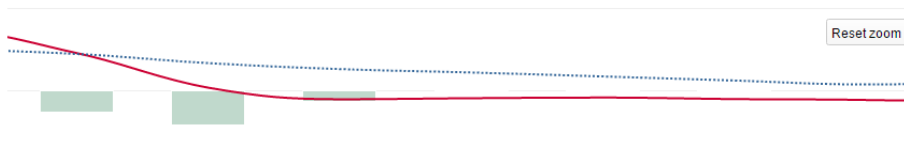
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
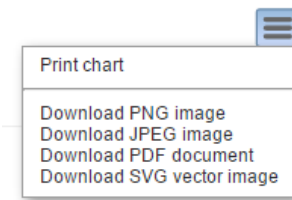
34.2.2.   Tank Reconciliation Error Breakdown

This section shows the delta, as well as the accumulated reconciliation error calculated for this Tank in a table format. Each row represents a point of time where the sample is taken

Click on Show/Hide link next to the Tank Breakdown header to show/hide this table.

Time	Reconciliation Error	Delta Reconciliation Error
16/01/2017 01:30	367.81 L	367.81 L
16/01/2017 03:00	15.24 L	-352.57 L
16/01/2017 04:30	431.38 L	416.14 L
16/01/2017 06:00	438.50 L	7.12 L
16/01/2017 07:30	-1,452.62 L	-1,891.12 L
16/01/2017 09:00	1,055.70 L	2,508.32 L
16/01/2017 10:30	482.28 L	-573.42 L
16/01/2017 12:00	438.17 L	-44.11 L
16/01/2017 13:30	76.34 L	-361.83 L
16/01/2017 15:00	450.35 L	374.01 L

(Tank Reconciliation Error Trend Report - Close up of Tank Reconciliation Error Breakdown)

Headers

Header	Description
Time	The time this sample is taken (time of calculation) Time is in DD/MM/YYYY HH:MM format.
Reconciliation Error	The accumulated reconciliation error since the start of the report up to this point of time in litres.
Delta Reconciliation Error	The delta reconciliation error in litres(The reconciliation error calculated from the last sample until this point of time)

34.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

34.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly. Only three rows are included from the same type as an example.

	A	B	C	D
1		Timestamp	Accumulated Error	Delta Error
2	Inpit 1	16/01/2017 01:30	367.81	367.81
3	Inpit 1	16/01/2017 03:00	15.24	-352.57
4	Inpit 1	16/01/2017 04:30	431.38	416.14
5	Inpit 1	16/01/2017 06:00	438.5	7.12
6	Inpit 1	16/01/2017 07:30	-1452.62	-1891.12
7	Inpit 1	16/01/2017 09:00	1055.7	2508.32
8	Inpit 1	16/01/2017 10:30	482.28	-573.42
9	Inpit 2	16/01/2017 01:30	195.59	195.59
10	Inpit 2	16/01/2017 03:00	336.59	141
11	Inpit 2	16/01/2017 04:30	415.85	79.26
12	Inpit 2	16/01/2017 06:00	225.9	-189.95
13	Inpit 2	16/01/2017 07:30	103.97	-121.93
14	Inpit 2	16/01/2017 09:00	-492.56	-596.53
15	Inpit 2	16/01/2017 10:30	42.13	534.69
16	Inpit 2	16/01/2017 12:00	187.32	145.19

(Tank Reconciliation Error Trend Report - Close up of CSV format)

35.   Stock Trend Report

Revision History

Rev.	Description
	Before you start
	You need to know about Tanks in AdaptIQ. Please visit this page for more information "Tank Details"

35.1.   Overview

The Stock Trend report allows you to collect data about the storage level of each selected Tank over a period of time, as well as collating the stock of the overall site per product. over a period of time.

Important data collected by this report

- Stock Level per Tank over a period of time
- Stock Level per Site over a period of time

Report Generation

(*Full View of the Stock Trend Report Generation page*)

This report has the following generation parameters:

- Period
- Tanks

- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

35.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

35.2.1.   Overall Site Product Stock Chart

- This graph shows a specific product stock for the whole site over a period of time in the form of a line chart (i.e. Diesel Stock over 1 month period)
- The chart sampling depends on the period the chart covers (i.e. for 1 week chart, a sample is taken every 1.5 hrs, while for a 1 month chart, a sample is taken every 6 hrs)
- The vertical axis shows the Volume in litres, while the horizontal axis represents the Date/Time
- The two horizontal red lines represent the Reorder Level, and the Safe Fill Level for the whole site. For normal operation, all points should be between these two levels.
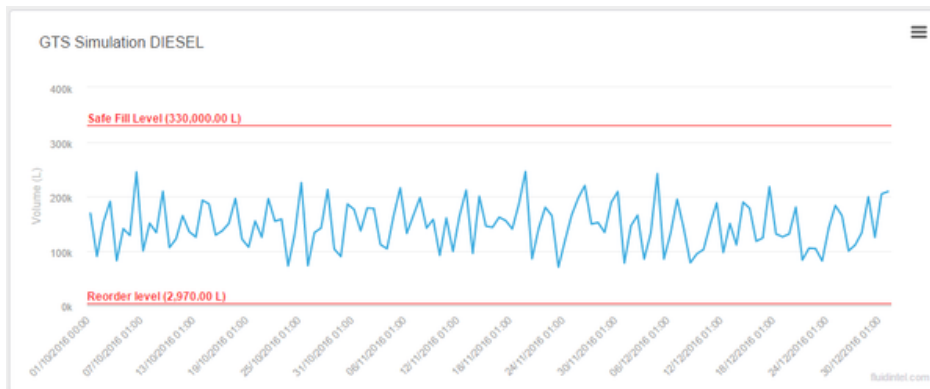
(Stock Trend - Close up of Overall Site Product Stock Chart)

Actions

- Hover you mouse over a specific bar to display information about this sample
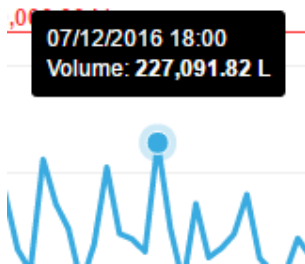
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
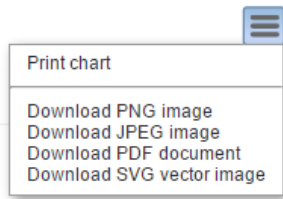
Tank *Name*

- This section is repeatable per selected Tank.
- This graph shows the stock for a selected Tank over a period of time in the form of a line chart (i.e. Diesel Stock over 1 month period)
- The chart sampling depends on the period the chart covers (i.e. for 1 week chart, a sample is taken every 1.5 hrs, while for a 1 month chart, a sample is taken every 6 hrs)
- The vertical axis shows the Volume in litres, while the horizontal axis represents the Date/Time
- The two horizontal red lines represent the Reorder Level, and the Safe Fill Level for this Tank. For normal operation, all points should be between these two levels.
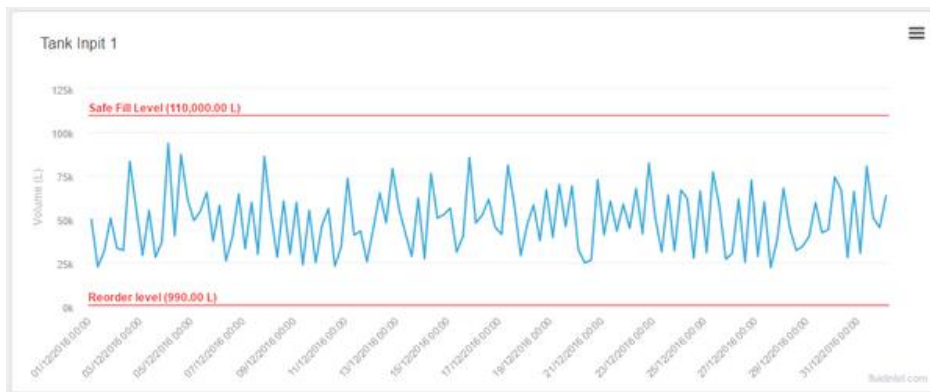
(Stock Trend - Close up of Tank Stock Chart)

Actions

- Hover you mouse over a specific bar to display information about this sample
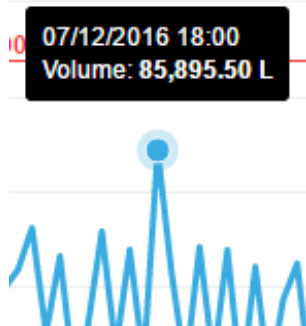
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
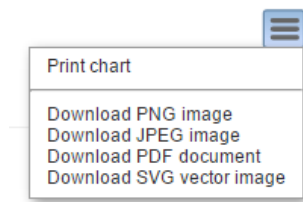
35.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

35.4. Report CSV Format

This format is mainly used by third party applications as a form of integration. The CSV data represents the Reorder Level, and SFL for each graph, in addition to the graph points in numerical form.

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D
1		GTS Simulation DIESEL	Tank Inpit 1	Tank Inpit 2
2	Reorder Level	2970	990	1980
3	Safe Fill Capacity for Product	297000	99000	198000
4	2016-12-01 00:00:00 +1100	145485.67	49821.33	95664.34
5	2016-12-01 06:00:00 +1100	187685.52	22547.71	165137.81
6	2016-12-01 12:00:00 +1100	158142.08	31492.9	126649.18
7	2016-12-01 18:00:00 +1100	138052.11	50488.45	87563.66
8	2016-12-02 00:00:00 +1100	90989.46	33249.01	57740.45
9	2016-12-02 06:00:00 +1100	146483.64	32106.36	114377.28
10	2016-12-02 12:00:00 +1100	216684.78	83119.53	133565.25
11	2016-12-02 18:00:00 +1100	163608.38	55965.12	107643.26

(Stock Trend - Close up of CSV format)

36. Delivery Confirmation Report

Revision History

Rev.	Description
	Before you start
	You need to know about Deliveries and Delivery Dockets

36.1. Overview

The Delivery Transactions report allows you to collect data about confirmed deliveries to selected Tanks over a period of time.

Important data collected by this report

- List of confirmed deliveries over the reported period
- Volume discrepancy for each confirmed delivery record

Report Generation

(*Full View of the Delivery Confirmation Report Generation page*)

This report has the following generation parameters:

- Period

- Tanks
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

36.2.   Report On Screen View / Report Data

This report shows the following sections from top to bottom.

36.2.1.   Tank

This section shows all confirmed deliveries to a selected Tank over a period if time in a table format. At the top right of the table, you can see two important tank parameters:

Confirmation: this shows the type of confirmation as configured in the Tank page. One of the following:

- Variance: if the difference in volume between Primary and Secondary volumes is within a certain percentage, the delivery will be autoconfirmed by the system. Otherwise manual confirmation is needed.
- Automatic: all deliveries will be automatically confirmed.
- Manual: all deliveries need manual confirmation.

Temp Comp: One of the following

- Yes: if the tank is temperature compensated.
- No: if the tank is not temperature compensated and shows only the ambient volume.

Tank Inpit 2 (Inpit 2)   Confirmation variance   Temp Comp No

Confirmed Deliveries

Collected At	Supplier	Docket Number	Status	Confirmation Time	Primary Volume	Secondary Volume	Difference
09/01/2017 17:34	Hydrocarb...	DD001	Confirmed	16/01/2017 15:15	137,711.99 L (GTS)	13,771,199.00 L ≠ 13,633,487.01 L (DOCKET)	(99.00 %)
10/01/2017 16:29			Confirmed	16/01/2017 15:15	142,412.62 L (GTS)	N/A	N/A
11/01/2017 16:52			Confirmed	16/01/2017 15:15	107,847.41 L (GTS)	N/A	N/A
12/01/2017 14:18			Confirmed	16/01/2017 15:15	112,486.65 L (GTS)	N/A	N/A
13/01/2017 07:57			Confirmed	16/01/2017 15:15	166,203.96 L (GTS)	N/A	N/A
14/01/2017 06:34			Confirmed	16/01/2017 15:15	151,178.27 L (GTS)	N/A	N/A
15/01/2017 07:06			Confirmed	16/01/2017 15:15	116,710.02 L (GTS)	N/A	N/A

(Delivery Confirmation Report - close up of Tank section)

Headers

Header	Description
Collected At	Date of the delivery in DD/MM/YYYY HH:MM format
Supplier	The supplier who made the delivery
Docket Number	The docket number, if the delivery has an attached Delivery Docket entry.
Status	The status of delivery. Always confirmed in this case.
Confirmation Time	The time this delivery entry is confirmed in DD/MM/YYYY HH:MM format
Primary Volume	Primary delivered volume in litres. Volume obtained from GTS in the above example.
Secondary Volume	Secondary delivered volume in litres. Docketed Volume in the above example.
Difference	Volume discrepancy between primary and secondary volumes, in form of a number in litres and a percentage. The discrepancy could be a positive or negative value, and represented by green upwards arrow, or red downwards arrow respectively.

36.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

36.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Tank Code	Tank Description	Tank Confirmation Type	Temperature Compensated	Collected at	Supplier	Docket Number	Primary Volume	Primary Volume Type	Secondary Volume	Secondary Volume Type	Raw Difference	Percentage Diff to Docket	Status	Confirmation Time
2	Inpit 1	Inpit 1	variance	No	9/1/2017 1:37			73,167.38	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
3	Inpit 1	Inpit 1	variance	No	9/1/2017 15:54			78,993.06	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
4	Inpit 1	Inpit 1	variance	No	10/1/2017 4:43			73,683.15	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
5	Inpit 1	Inpit 1	variance	No	10/1/2017 15:58			78,580.89	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
6	Inpit 1	Inpit 1	variance	No	11/1/2017 3:46			86,427.57	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
7	Inpit 1	Inpit 1	variance	No	11/1/2017 17:24			59,259.90	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
8	Inpit 1	Inpit 1	variance	No	12/1/2017 2:45			64,130.15	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
9	Inpit 1	Inpit 1	variance	No	12/1/2017 14:40			80,889.62	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
10	Inpit 1	Inpit 1	variance	No	13/01/2017 02:23			54,296.27	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15
11	Inpit 1	Inpit 1	variance	No	13/01/2017 12:06			56,630.94	GTS	N/A	DOCKET	N/A	N/A	Confirmed	16/01/2017 15:15

(Delivery Confirmation Report - close up of CSV format)

37. Delivery Variance Report

Revision History

Rev.	Description
	Before you start
	You need to know about Deliveries and Delivery Dockets

37.1. Overview

The Delivery Variance report allows you to collect data about deliveries to selected Tanks over a period of time, and to compare Primary and Secondary volumes recorded for these deliveries.

Important data collected by this report

- List of deliveries over the reported period
- Volume discrepancy for each delivery record
- Final estimated volume for each record as calculated by the system

Report Generation

(*Full View of the Delivery Variance Report Generation page*)

This report has the following generation parameters:

- Period
- Tanks
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

37.2. Report On Screen View

This report shows the following sections from top to bottom.

37.2.1. Delivery Data

This section shows all deliveries to the selected Tanks over a period of time in a table format. This table is partitioned per Tank. The main focus of the table data is to display the discrepancy between recorded volumes.

Delivery Data

Tank Inpit 1

Collected At	End Time	Driver	Docket Number	Primary Volume	Secondary Volume	Difference	Estimated Volume
21/04/2017 09:25	Conoc...			75,688.46 L (GTS)	75,700.00 L (DOCKET)	▼ 11.54 L (0.02 %)	75,688.46 L
21/04/2017 21:34	Shell			84,769.71 L (GTS)	84,800.00 L (DOCKET)	▼ 30.29 L (0.04 %)	84,994.58 L
22/04/2017 12:24	Conoc...			68,255.42 L (GTS)	68,500.00 L (DOCKET)	▼ 244.58 L (0.36 %)	68,255.42 L
22/04/2017 21:25	Shell			66,723.90 L (GTS)	67,000.00 L (DOCKET)	▼ 276.10 L (0.41 %)	66,938.70 L
23/04/2017 08:47	Shell			67,374.33 L (GTS)	67,500.00 L (DOCKET)	▼ 125.67 L (0.19 %)	67,374.33 L
23/04/2017 22:07	Shell			83,971.95 L (GTS)	84,000.00 L (DOCKET)	▼ 28.05 L (0.03 %)	84,900.48 L

(Delivery Variance Report - close up of Delivery Data section)

Headers

Header	Description
Collected At	Date of the delivery in DD/MM/YYYY HH:MM format
Supplier	The supplier who made the delivery

Driver	The driver who made the delivery
Docket Number	The docket number, if the delivery has an attached Delivery Docket entry.
Primary Volume	Primary delivered volume in litres. Volume obtained from GTS in the above example.
Secondary Volume	Secondary delivered volume in litres. Docketed Volume in the above example.
Difference	Volume discrepancy between primary and secondary volumes, in form of a number in litres and a percentage. The discrepancy could be a positive or negative value, and represented by green upwards arrow, or red downwards arrow respectively.
Estimated Volume	The final volume estimated by AdaptIQ for this delivery in litres. The volume estimation metrics vary from one site to another according to AdaptIQ settings for this Site/Tanks

Primary and Secondary Volumes

In AdaptIQ different volumes could be recorded for the same delivery. Primary and Secondary volumes are different from one site to another, and from Tank to another according to a number of variable:

- "Use Docket (Entered) Volume for Deliveries" is enabled or not for a site.
- Temperature Compensated features is enabled or not for a Tank
- GTS service is enabled or not for a Tank.

37.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

37.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Description	Collected at	End Time	Duration	Supplier	Driver	Docket Number	Primary Volume	Primary Volume Type	Secondary Volume	Secondary Volume Type	Raw Difference	Percentage Diff to Docket	Estimated Volume
2	Tank Inpit 1	21/4/2017 9:25	21/4/2017 12:36	11460	Conoco Phillips			75,688.46	GTS	75,700.00	DOCKET	-11.54	0.02	75,688.46 L
3	Tank Inpit 1	21/4/2017 21:34	22/4/2017 1:05	12660	Shell			84,769.71	GTS	84,800.00	DOCKET	-30.29	0.04	84,994.58 L
4	Tank Inpit 1	22/4/2017 12:24	22/4/2017 15:20	10560	Conoco Phillips			68,255.42	GTS	68,500.00	DOCKET	-244.58	0.36	68,255.42 L
5	Tank Inpit 1	22/4/2017 21:25	23/4/2017 0:11	9960	Shell			66,723.90	GTS	67,000.00	DOCKET	-276.1	0.41	66,938.70 L
6	Tank Inpit 1	23/4/2017 8:47	23/4/2017 11:45	10680	Shell			67,374.33	GTS	67,500.00	DOCKET	-125.67	0.19	67,374.33 L
7	Tank Inpit 2	21/4/2017 11:25	21/4/2017 15:57	16320	Conoco Phillips			109,286.52	GTS	109,900.00	DOCKET	-613.48	0.56	109,286.52 L
8	Tank Inpit 2	22/4/2017 5:17	22/4/2017 11:46	23340	Conoco Phillips			154,597.43	GTS	155,200.00	DOCKET	-602.57	0.39	154,597.43 L
9	Tank Inpit 2	23/4/2017 8:22	23/4/2017 14:04	20520	Conoco Phillips			135,937.46	GTS	163,200.00	DOCKET	-27,262.54	16.7	135,937.46 L
10	Tank Inpit 2	24/4/2017 8:22	24/4/2017 15:39	26220	Shell			175,695.91	GTS	176,000.00	DOCKET	-304.09	0.17	175,695.91 L
11	Tank Inpit 2	25/4/2017 11:45	25/4/2017 17:38	21180	Conoco Phillips			142,043.18	GTS	143,000.00	DOCKET	-956.82	0.67	142,043.18 L
12	Tank Inpit 2	26/4/2017 7:24	26/4/2017 13:31	22020	Shell			145,975.73	GTS	146,000.00	DOCKET	-24.27	0.02	145,975.73 L

(Delivery Variance Report - close up of CSV format)

38.   Simple Burn Rate Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment in AdaptIQ.
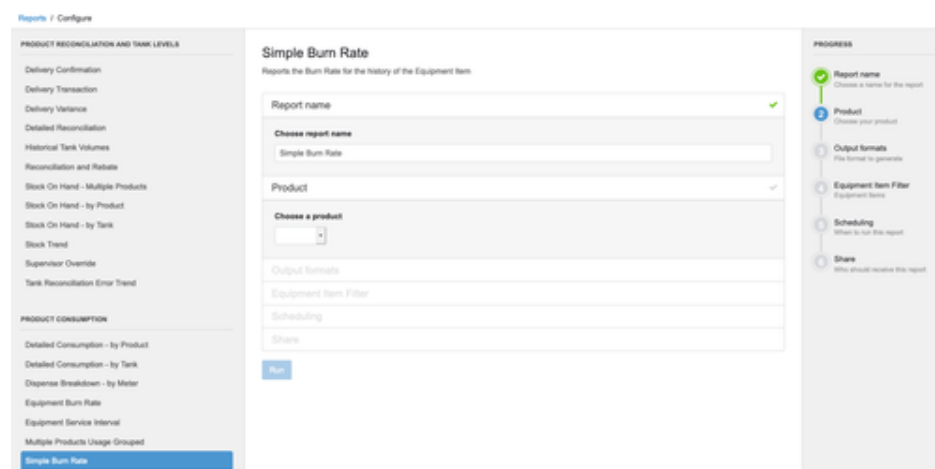
38.1.   Overview

The Simple Burn Rate Report generates a list of equipment, and their Burn Rate. The Burn Rate is calculated using the fuel consumption of the equipment, and the incremental Service Meter. The report focus only on "In Service" equipment. that are owned by the site (not labelled as "Is Contractor?")

Important data collected by this report

- Incremental service meter per equipment item
- Total consumed Diesel per equipment item
- Average Burn Rate per equipment item

Report Generation

(*Full View of Simple Burn Rate - Report Generation page*)

This report has the following generation parameters:

- Product (Single Product)
- Output formats (CSV only)
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

38.2. Report On Screen View / Report Data

This report doesn't have On Screen View

38.3. Report PDF Format

This report doesn't have PDF format

38.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G
1	Equipment Item ID	Equipment Item Description	Service Interval Type	Service Meter Increment	Last Service Meter Value	Total DIESEL Volume	Burn Rate
2	LV 000	LV 000	Hrs	8976	8985	32130.29	3.58
3	LV 001	LV 001	Hrs	8978	8981	32177.01	3.58
4	LV 002	LV 002	Hrs	8966	8983	32139.01	3.58
5	LV 003	LV 003	Hrs	8955	8967	37407.18	4.18
6	LV 004	LV 004	Hrs	8971	8977	37554.86	4.19
7	LV 005	LV 005	Hrs	8960	8974	32101.75	3.58
8	LV 006	LV 006	Hrs	8974	8980	37452.78	4.17
9	LV 007	LV 007	Hrs	8966	8972	37504.87	4.18

(Simple Burn Report - close up of CSV format)

Headers

Header	Description

Equipment Item ID	The unique identifier of this Equipment Item in AdaptIQ
Equipment Item Description	The given description of this Equipment Item
Service Interval Type	It is dependent on the type of equipment the report will select from: engine hours(Hrs), odometer(Km) or kWh.
Service Meter Increment	The incremental value of the service interval for this equipment since it is firstly operated.
Last Service Meter Value	Last Service Meter Interval before this Equipment Item is serviced
Total DIESEL Volume	Total diesel consumed since this Equipment Item is firstly operated.
Burn Rate	The average Burn Rate for this Equipment Item = Total DIESEL Volume/Service Meter Increment

39.   Multiple Products Usage Grouped Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment, Equipment Groups, and Equipment Categories in AdaptIQ.

39.1.   Overview

The Multiple Products Usage Grouped report allows you to collect data about the consumption of each selected Product categorised by Equipment Group, Equipment Category, Department, or Cost Centre.

Important data collected by this report

- Product consumption categorised over a period of time
- Consumption variance

Report Generation

(*Full View of Multiple Products Usage Grouped Report Generation page*)

This report has the following generation parameters:

- Period
- Product (Multiple product)
- Data Output
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

39.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

39.2.1. Product

- This graph shows the collective product usage over the reported period in the form of a pie chart, that is partitioned by Group, Category, Department, or Cost Centre. In the below example, the pie is partition by Equipment Group, and each group usage share from the overall product usage is represented by the size of its slice.
- At the top left, the whole product usage is displayed in litres.
- Next to the chart, you can see the list of groups, together with their usage in litres, and their colour code as displayed in the chart.
- This section is repeatable per selected product.
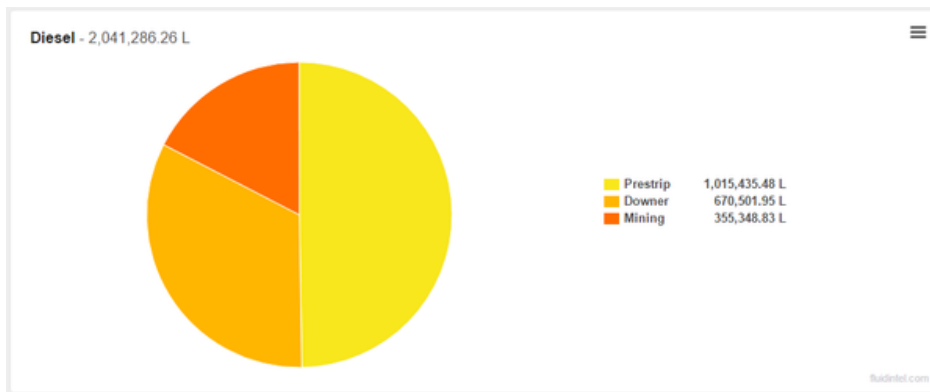
Diesel - 2,041,286.26 L

Prestrip	1,015,435.48 L
Downer	670,501.95 L
Mining	355,348.83 L

(Multiple Products Usage Grouped Report - Close up of Product section)

Actions

- Hover you mouse over a specific pie slice to display information about the group this slice represents
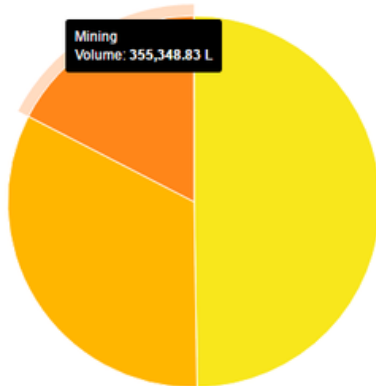
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
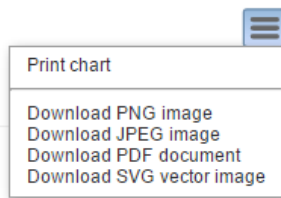
39.2.2.   Consumption Details

This section shows the product consumption per Group, Category, Department, or Cost Centre over the reported period, and a previous period. In addition to displaying the discrepancy between both periods. This data is displayed in the form of a table, that is partitioned per selected product.

The data in this table is sorted as per the sorting criterion selected during the report generation.

(Multiple Products Usage Grouped Report - Close up of Consumption Details section)

Headers

Header	Description

Equipment Group	The name of the Group, Category, Department, or Cost Centre.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

39.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

39.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D
1	product	equipment_group	previous_volume	current_volume
2	Diesel	Downer	647,156.69	670,501.95
3	Diesel	Mining	361,433.69	355,348.83
4	Diesel	Prestrip	981,072.84	1,015,435.48
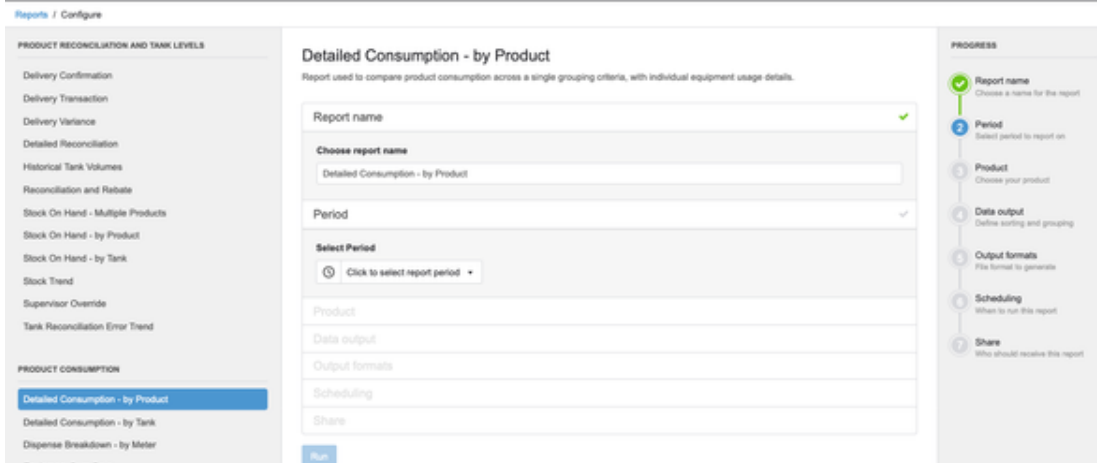
(Multiple Products Usage Grouped Report - Close up of CSV format)

40.   Detailed Consumption - by Product Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment, Equipment Groups, and Equipment Categories in AdaptIQ.

40.1.   Overview

The Detailed Consumption - by Product report allows you to collect data about the consumption of a single Product categorised by Equipment Group, Equipment Category, Department, or Cost Centre. In addition to displaying the individual consumption of each Equipment Item.

Important data collected by this report

- Product consumption categorised over a period of time
- Individual consumption per equipment item
- Consumption variance per group, and equipment item.

This report is similar to Detailed Consumption - by Tank Report, except for:

Detailed Consumption - by Product Report: selects all Tanks holding the selected product in the overall site.

Detailed Consumption - by Tank Report: allows the user to select the Tanks to focus only on the data collated for these Tanks.

In other words, if the user generated a Detailed Consumption - by Tank Report, and selected all the Tanks, the resulted report will be the same report as Detailed Consumption - by Product Report

Report Generation

(*Full View of Detailed Consumption - by Product Report Generation page*)

This report has the following generation parameters:

- Period
- Product (Single product)
- Data Output
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

40.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

40.2.1. Product

- This graph shows the collective product consumption over the reported period in the form of a pie chart, that is partitioned by Group, Category, Department, or Cost Centre. In the below example, the pie is partition by Equipment Category, and each category usage share from the overall product usage is represented by the size of its slice.
- At the top left, the product name is displayed.
- Next to the chart, you can see the list of categories, together with their usage in litres, and their colour code as displayed in the chart.

(Detailed Consumption - by Product Report - Close up of Product section)

Actions

- Hover you mouse over a specific pie slice to display information about the category this slice represents

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action

40.2.2.   Summary

This section shows the product consumption per Group, Category, Department, or Cost Centre over the reported period, and a previous period. In addition to displaying the discrepancy between both periods.

The data in this table is sorted as per the sorting criterion selected during the report generation.

Summary

Equipment category	Previous Total	Current Total	Change
Dozers	105,319.49 L	106,008.41 L	0.65%
Haul Trucks	1,874,447.27 L	1,925,119.11 L	2.70%
Light Vehicle	9,896.46 L	10,158.74 L	2.65%

(Detailed Consumption - by Product Report - Close up of Summary section)

Headers

Header	Description
Equipment Category	The name of the Group, Category, Department, or Cost Centre.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

40.2.3.   Consumption Details

This section shows the product consumption per Equipment Item categorised by Group, Category, Department or Cost Centre over the reported period, and a previous period. In addition to displaying the discrepancy between both periods.

The data in this table is sorted as per the sorting criterion selected during the report generation.

Consumption details

DOZERS

Equipment code	Previous Total	Current Total	Change
Dozer 000	11,391.75 L	9,433.78 L	-17.19%
Dozer 001	11,392.80 L	11,692.74 L	2.63%

(Detailed Consumption - by Product Report - Close up of Consumption Details section)

Headers

Header	Description
Equipment Code	The name of the Group, Category, Department, or Cost Centre.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

40.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

40.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.
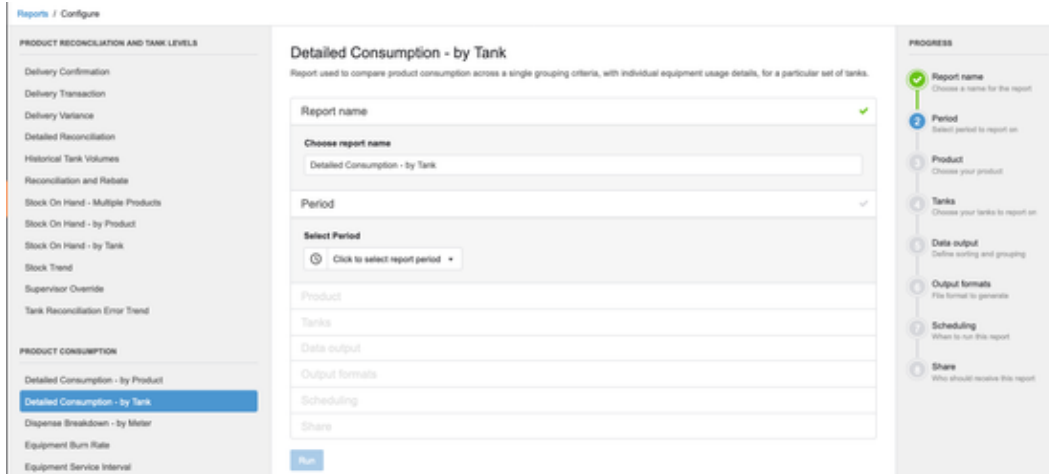
	A	B	C	D
1	equipment_category	equipment	previous_volume	current_volume
2	HAUL	TR 023	65,005.41	71,175.02
3	HAUL	TR 002	67,931.96	71,052.20
4	HAUL	TR 029	63,922.31	70,864.74
5	Dozers	Dozer 001	11,392.80	11,692.74
6	Dozers	Dozer 008	10,945.84	11,692.55
7	Dozers	Dozer 007	10,449.67	11,537.22
8	LV	LV 007	313.05	402.43
9	LV	LV 011	333.59	387.02
10	LV	LV 025	374.88	382.87

(Detailed Consumption - by Product Report - Close up of CSV format)

41.   Detailed Consumption - by Tank Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment, Equipment Groups, and Equipment Categories in AdaptIQ.

41.1.   Overview

The Detailed Consumption - by Tank report allows you to collect data about the consumption of a single Product from a specific set of Tanks, categorised by Equipment Group, Equipment Category, Department, or Cost Centre. In addition to displaying the individual consumption of each Equipment Item.

Important data collected by this report

Data collected per selected Tank, Set of selected Tanks

- Product consumption categorised over a period of time
- Individual consumption per equipment item
- Consumption variance per group, and equipment item.

This report is similar to Detailed Consumption - by Product Report, except for:

Detailed Consumption - by Product Report: selects all Tanks holding the selected product in the overall site.

Detailed Consumption - by Tank Report: allows the user to select the Tanks to focus only on the data collated for these Tanks.

In other words, if the user generated a Detailed Consumption - by Tank Report, and selected all the Tanks, the resulted report will be the same report as Detailed Consumption - by Product Report

Report Generation

(*Full View of Detailed Consumption - by Tank Report Generation page*)

This report has the following generation parameters:

- Period
- Product (Single product)
- Tanks
- Data Output
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

41.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

41.2.1. Product

- This graph shows the collective product consumption over the reported period from the selected Tanks in the form of a pie chart, that is partitioned by Group, Category, Department, or Cost Centre. In the below example, the pie is partition by Equipment Category, and each category usage share from the overall product usage is represented by the size of its slice.
- At the top left, the product name is displayed.
- Next to the chart, you can see the list of categories, together with their usage in litres, and their colour code as displayed in the chart.

(Detailed Consumption - by Tank Report - Close up of Product section)

Actions

- Hover you mouse over a specific pie slice to display information about the category this slice represents

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action

41.2.2. Summary

This section shows the product consumption from the selected Tanks per Group, Category, Department, or Cost Centre over the reported period, and a previous period. In addition to displaying the discrepancy between both periods.

The data in this table is sorted as per the sorting criterion selected during the report generation.

Summary			
Equipment category	Previous Total	Current Total	Change
Dozers	105,319.49 L	106,008.41 L	0.65%
Haul Trucks	1,874,447.27 L	1,925,119.11 L	2.70%
Light Vehicle	9,896.46 L	10,158.74 L	2.65%

(Detailed Consumption - by Tank Report - Close up of Summary section)

Headers

Header	Description
Equipment Category	The name of the Group, Category, Department, or Cost Centre.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

41.2.3.   Consumption Details

This section shows the product consumption from the selected Tanks per Equipment Item categorised by Group, Category, Department or Cost Centre over the reported period, and a previous period. In addition to displaying the discrepancy between both periods.

The data in this table is sorted as per the sorting criterion selected during the report generation.

Consumption details

DOZERS

Equipment code	Previous Total	Current Total	Change
Dozer 000	11,391.75 L	9,433.78 L	-17.19%
Dozer 001	11,392.80 L	11,692.74 L	2.63%

Scroll Page

HAUL TRUCKS

Equipment code	Previous Total	Current Total	Change
TR 000	64,612.63 L	61,274.92 L	-5.17%
TR 001	58,790.10 L	55,915.37 L	-4.89%
TR 002	67,931.96 L	71,052.20 L	4.59%

(Detailed Consumption - by Tank Report - Close up of Consumption Details section)

Headers

Header	Description
Equipment Code	The name of the Group, Category, Department, or Cost Centre.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

41.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

41.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

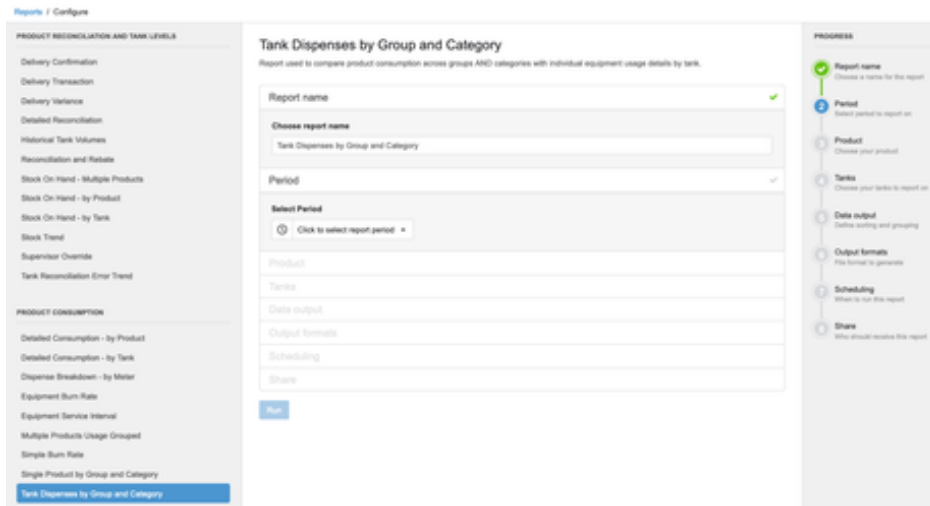|	A	B	C	D
	equipment_category	equipment	previous_volume	current_volume
2	HAUL	TR 023	65,005.41	71,175.02
3	HAUL	TR 002	67,931.96	71,052.20
4	HAUL	TR 029	63,922.31	70,864.74
5	Dozers	Dozer 001	11,392.80	11,692.74
6	Dozers	Dozer 008	10,945.84	11,692.55
7	Dozers	Dozer 007	10,449.67	11,537.22
8	LV	LV 007	313.05	402.43
9	LV	LV 011	333.59	387.02
10	LV	LV 025	374.88	382.87

(Detailed Consumption - by Tank Report - Close up of CSV format)

42.   Tank Dispenses by Group and Category Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment, Equipment Groups, and Equipment Categories in AdaptIQ.

42.1.   Overview

The Tank Dispenses by Group and Category report allows you to collect data about the consumption of a single Product from a specific set of Tanks, grouped by two criteria (Equipment Group then Equipment Category or vice versa). In addition to displaying the individual consumption of each Equipment Item.

Important data collected by this report

Data collected per selected Tank, Set of selected Tanks

- Product consumption grouped over a period of time.
- Individual consumption per equipment item.
- Consumption variance per group, and equipment item.

This report is similar to Single Product by Group and Category Report, except for:

Single Product by Group and Category Report: selects all Tanks holding the selected product in the overall site.

Tank Dispenses by Group and Category Report: allows the user to select the Tanks to focus only on the data collated for these Tanks.

In other words, if the user generated a Tank Dispenses by Group and Category Report, and selected all the Tanks, the resulted report will be the same report as Single Product by Group and Category Report

Report Generation

(*Full View of Tank Dispenses by Group and Category Report Generation page*)

This report has the following generation parameters:

- Period
- Product (Single product)
- Tanks
- Data Output
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

42.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

42.2.1.   Product

- This graph shows the collective product consumption from the selected Tank(s) over the reported period in the form of a bar chart
- The x axis represents the product consumption in litres, while the y axis represents the Equipment Group, or Equipment Category, whichever one represents the first grouping criterion.
- Click on one of the bars to convert the chart to display the second grouping criterion (Group or Category) for the selected bar. In this case the chart will display the consumption per category for a selected group, or the consumption per group for a selected category.

(Tank Dispenses by Group and Category Report - Close up of Product section)

Actions

- Hover you mouse over a specific bar to display information about the category or group represented by this bar

- Click on one of the bars to categorise the data inside this group. Press Back to Product button to return back to the main chart.

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
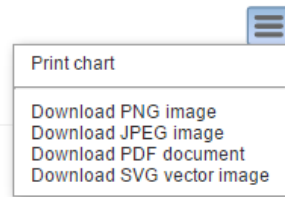
42.2.2.   Summary

- This section shows the product consumption from selected Tank(s) partitioned by Group or Category, in addition to a breakdown to the consumption of every partition by Group or Category.

- The below example shows the consumption partitioned by Equipment Group, and detailed by Equipment Category inside each Equipment Group. The totals are displayed for each Group at the end of the partition.
- The data in this table is sorted as per the sorting criterion selected during the report generation.

(Tank Dispenses by Group and Category Report - Close up of Summary section)

Headers

Header	Description
Equipment Category/Group	The name of the Group or Category, whichever one is selected as the second grouping criterion.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

42.2.3. Equipment Consumption

This section shows the product consumption from selected Tank(s) per Equipment Item in a table format partitioned by Group/Category or Category/Group over the reported period, and a previous period. In addition to displaying the discrepancy between both periods.

(Tank Dispenses by Group and Category Report - Close up of Equipment Consumption section)

Headers

Header	Description
Equipment	The Equipment ID as configured in AdaptIQ.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

42.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

42.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

equipment_group	equipment_category	equipment	previous_volume	current_volume
Downer	Dozers	Dozer 000	11,391.75	9,433.78
Downer	Dozers	Dozer 001	11,392.80	11,692.74
Downer	HAUL	TR 000	64,612.63	61,274.92
Downer	HAUL	TR 001	58,790.10	55,915.37
Downer	LV	LV 000	283.81	326.85
Downer	LV	LV 001	291.63	310.82
Mining	Dozers	Dozer 002	11,222.07	11,117.87
Mining	Dozers	Dozer 003	9,692.79	9,486.60
Mining	HAUL	TR 010	60,315.24	51,389.06
Mining	HAUL	TR 011	59,855.41	61,220.34
Mining	LV	LV 010	349.13	354.72
Mining	LV	LV 011	333.59	387.02
Prestrip	Dozers	Dozer 007	10,449.67	11,537.22
Prestrip	Dozers	Dozer 008	10,945.84	11,692.55
Prestrip	HAUL	TR 028	70,447.54	66,387.53
Prestrip	HAUL	TR 029	63,922.31	70,864.74
Prestrip	LV	LV 020	295.43	323.97
Prestrip	LV	LV 021	336.74	352.8

(Tank Dispenses by Group and Category Report - Close up of CSV format)

43.   Single Product by Group and Category Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment, Equipment Groups, and Equipment Categories in AdaptIQ.

43.1.   Overview

The Single Product by Group and Category report allows you to collect data about the consumption of a single Product grouped by two criteria (Equipment Group then Equipment Category or vice versa). In addition to displaying the individual consumption of each Equipment Item.

Important data collected by this report

- Product consumption grouped over a period of time.
- Individual consumption per equipment item.
- Consumption variance per group, and equipment item.

This report is similar to Tank Dispenses Product by Group and Category Report, except for:

Single Product by Group and Category Report: selects all Tanks holding the selected product in the overall site.

Tank Dispenses by Group and Category Report: allows the user to select the Tanks to focus only on the data collated for these Tanks.

In other words, if the user generated a Tank Dispenses by Group and Category Report, and selected all the Tanks, the resulted report will be the same report as Single Product by Group and Category Report

Report Generation

(*Full View of Single Product by Group and Category Report Generation page*)

This report has the following generation parameters:

- Period
- Product (Single product)
- Data Output
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

43.2.   Report On Screen View / Report Data

This report shows the following sections from top to bottom.

43.2.1.   Product

- This graph shows the collective product usage over the reported period in the form of a bar chart.
- The x axis represents the product consumption in litres, while the y axis represents the Equipment Group, or Equipment Category, whichever one represents the first grouping criterion.
- Click on one of the bars to convert the chart to display the second grouping criterion (Group or Category) for the selected bar. In this case the chart will display the consumption per category for a selected group, or the consumption per group for a selected category.

(Single Product by Group and Category Report - Close up of Product section)

Actions

- Hover you mouse over a specific bar to display information about the category or group represented by this bar
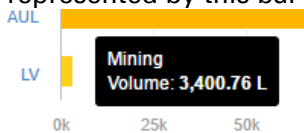
- Click on one of the bars to categorise the data inside this group. Press Back to Product button to return back to the main chart.

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
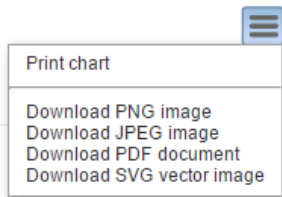
43.2.2.   Summary

- This section shows the product consumption partitioned by Group or Category, in addition to a breakdown to the consumption of every partition by Group or Category.

- The below example shows the consumption partitioned by Equipment Group, and detailed by Equipment Category inside each Equipment Group. The totals are displayed for each Group at the end of the partition.
- The data in this table is sorted as per the sorting criterion selected during the report generation.

(Single Product by Group and Category Report - Close up of Summary section)

Headers

Header	Description
Equipment Category/Group	The name of the Group or Category, whichever one is selected as the second grouping criterion.
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

43.2.3. Equipment Consumption

This section shows the product consumption per Equipment Item in a table format partitioned by Group/Category or Category/Group over the reported period, and a previous period. In addition to displaying the discrepancy between both periods.

(Single Product by Group and Category Report - Close up of Equipment Consumption section)

Headers

Header	Description
Equipment	The Equipment ID as configured in AdaptIQ
Previous Total	The consumption on the previous period. If the report is showing consumption for the last month, the previous total will be the consumption two months ago.
Current Total	The consumption on the selected period.
Change	The percentile change between the previous total, and the current total.

43.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

43.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E
1	equipment_group	equipment_category	equipment	previous_volume	current_volume
2	Downer	Dozers	Dozer 000	11,391.75	9,433.78
3	Downer	Dozers	Dozer 001	11,392.80	11,692.74
4	Downer	HAUL	TR 000	64,612.63	61,274.92
5	Downer	HAUL	TR 001	58,790.10	55,915.37
6	Downer	LV	LV 000	283.81	326.85
7	Downer	LV	LV 001	291.63	310.82
8	Mining	Dozers	Dozer 002	11,222.07	11,117.87
9	Mining	Dozers	Dozer 003	9,692.79	9,486.60
10	Mining	HAUL	TR 010	60,315.24	51,389.06
11	Mining	HAUL	TR 011	59,855.41	61,220.34
12	Mining	LV	LV 010	349.13	354.72
13	Mining	LV	LV 011	333.59	387.02
14	Prestrip	Dozers	Dozer 007	10,449.67	11,537.22
15	Prestrip	Dozers	Dozer 008	10,945.84	11,692.55
16	Prestrip	HAUL	TR 028	70,447.54	66,387.53
17	Prestrip	HAUL	TR 029	63,922.31	70,864.74
18	Prestrip	LV	LV 020	295.43	323.97
19	Prestrip	LV	LV 021	336.74	352.8

(Single Product by Group and Category Report - Close up of CSV format)

44.

44. Equipment Service Interval Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment in AdaptIQ.

44.1. Overview

The Equipment Service Interval report allows you to collect data about the Service Interval for each product used by each "In Service" Equipment. In addition it shows whether the Equipment is serviced overdue or not.

Important data collected by this report

- Service Interval per Equipment Item per Product
- Product used per Equipment Item since last service
- The percentile due per Equipment

Report Generation

(*Full View of Equipment Service Interval Report Generation page*)

This report has the following generation parameters:

- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

44.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

44.2.1. Equipment Items

This section shows a list of Equipment Items that are "In Service", and have one or more consumed product with "Service Interval" configured.

Equipment Items

Equipment Item	Last Service	% Due	TO410 Used	TO410 Limit	TO450 Used	TO450 Limit	15W/40 Used	15W/40 Limit	DIESEL Used	DIESEL Limit
1311		4263.3	156,203.00	10,000.00	95,461.00	N/A	213,164.00	5,000.00	58,964.68	8,000.00
1304		1040.7	200,828.00	N/A	184,607.00	500,000.00	251,782.00	N/A	1,040,703.10	100,000.00
1312		209.6	221,114.00	N/A	190,043.00	N/A	104,792.00	50,000.00	1,528.96	100,000.00
1308		0.6	111,566.00	N/A	256,783.00	N/A	242,015.00	N/A	3,003.33	500,000.00
pz123	09/01/2017 10:31	0.0	0.00	N/A	0.00	N/A	0.00	N/A	0.00	8,000.00

(Equipment Service Interval Report - Close up of Equipment Item section)

Headers

Header	Description
Equipment Item	The Equipment ID as configured by AdaptIQ
Last Service	Last Date/Time this equipment is serviced in DD/MM/YYYY HH:MM format
% Due	Percentile Service Due. If %Due<1: This Equipment Item is within its normal service interval for the set of consumed products If %Due>1 This Equipment Item is service overdue

Product Used	The volume consumed by this Equipment Item from this Product since the **Last Service**. This column is repeatable per Product.
Product Limit	The **Service Interval** for this product, as configured in the "Product Consumed" section for this Equipment Item This column is repeatable per Product.

How %Due is calculated

Product % Due = Product Used / Product Limit x 100 . This is calculated for each Consumed Product by this Equipment Item.

% Due = The biggest Product % Due

44.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

44.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H	I	J	K
1	Equipment Item	Last Service	% Due	TO410 Used	TO410 Limit	TO450 Used	TO450 Limit	15W/40 Used	15W/40 Limit	DIESEL Used	DIESEL Limit
2	1311		4263.28	156203	10000	95461		213164	5000	58964.68	8000
3	1304		1040.7031	200828		184607	500000	251782		1040703.1	100000
4	1312		209.584	221114		190043		104792	50000	1528.96	100000
5	1308		0.600666	111566		256783		242015		3003.33	500000
6	pz123	2017-01-09 10:31:00 +1100	0	0		0		0		0	8000

(Equipment Service Interval Report - Close up of CSV format)

45. Dispense Breakdown- by Meter

Revision History

Rev.	Description
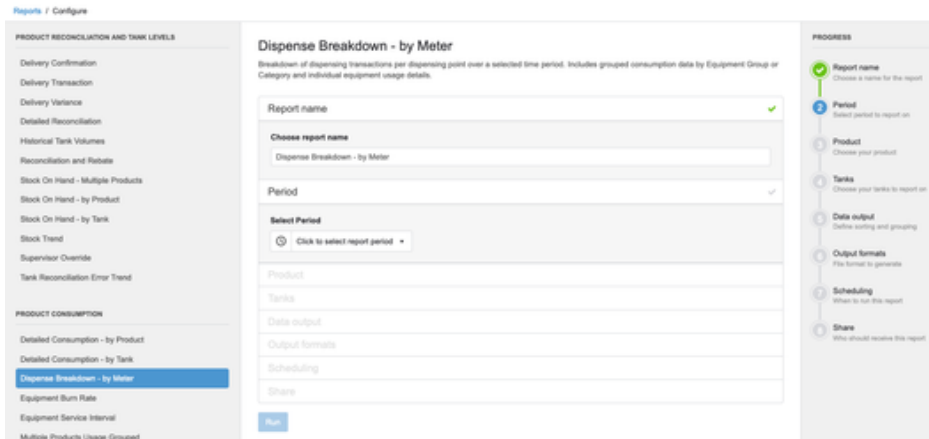
45.1. Overview

This report allows you to collect information on the flowmeters useful for maintenance

Important data collected by this report

Data collected by meter and by product

Report generation

(*Full View of the Dispense Breakdown- By Meter Report Generation page*)

This report has the following generation parameters:

- Period
- Product (single product)
- Tanks
- Data output
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

45.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

Product summary

These histograms show on the left the number of dispenses and on the right the volume in litres as a function of time for all selected meters.

Meters data comparison
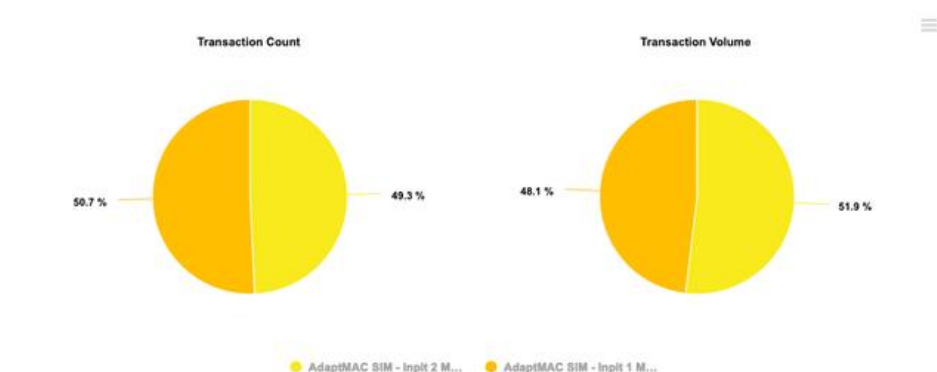
These dynamic pie charts allow you to compare the data of the selected meters with each other. On the left the number of transactions and on the right the transaction volumes. Each meter is represented by a colour and you can decide to display data for all or only some meters. To show/hide the data, click on the captions, once greyed out the data from this flowmeter no longer appears on the pie chart and the proportions are recalculated for the selected meters only.

Summary section

Summary
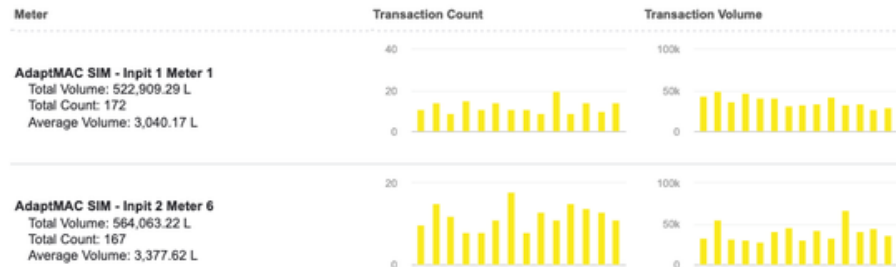
Field	Description
Meter- Total volume	Total volume in litres over the report period
Meter- Total count	Total number of transactions for the selected tanks over report period
Meter- Average volume	Average transaction volume over the report period

Summary of data by meter with individual histograms showing the number of distributions and corresponding volumes over the selected period for the report. This information and graphs are repeated for each flowmeter.

The following sections will appear depending on how you configured the "data output" part of the report.

Totals by Equipment Group

Code	Description	Volume (L)
Downer	Downer EDI	371,799.78
Mining	Mining	494,866.52
Prestrip	Prestrip	212,848.51

Field	Description
Code	Equipment group code or ID
Description	Equipment group description
Volume	Equipment group total volume in litres over the period for the selected tanks

Actions

- Hover you mouse over a specific bar/slice to display information about this sample
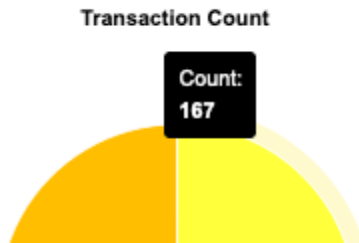
Transaction Count

Count:
167

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action

Print chart

Download PNG image
Download JPEG image
Download PDF document
Download SVG vector image
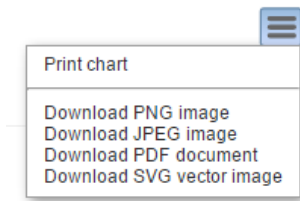
45.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

45.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	Name	Type	Current Ambient Volume (Diesel)	Current Temp Comp Volume (Diesel)	Temp Comp?	Safe Fill Level	Max Ops	Min Ops	Ullage	Reorder?	Usage 24 hours	Avg Daily Usage Last 30 days	Reading Time	Time Since Last Reading (mins)
2	Summary		87734.31	N/A	FALSE	297000	N/A	N/A	209265.69	N/A	253966.56	288431.02	N/A	N/A
3	Inpit 1	standalone	42754.08	N/A	FALSE	99000			56245.92	No	130365.84	144868.49	01-13 07:53:00	65
4	Inpit 2	standalone	44980.23	N/A	FALSE	198000			153019.77	No	123600.72	143562.53	01-13 07:53:00	65

(Dispenses Breakdown - By Meter - Close up of CSV format)

46. Fuel Tax Credit Report

Revision History

Rev.	Description
	Table of Contents
	• Overview • Report On Screen View / Report Data • Report PDF Format • Report CSV Format
	Before you start
	You need to know about Equipment, Rebate Levels, and Products in AdaptIQ.

46.1. Overview

The Fuel Tax Credit report allows you to calculate the rebate for the dispensed fuel to tax eligible Equipment Items over a period of time.

Important data collected by this report

- Dispensed fuel volume to tax eligible Equipment Items over a period of time.
- Total Rebate credit for the dispensed fuel to tax eligible Equipment Items over a period of time.

Report Generation

(*Full View of Fuel Tax Credit Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

46.2.   Report On Screen View / Report Data

This report doesn't have On Screen View

46.3.   Report PDF Format

This report doesn't have PDF format

46.4.   Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C
1	Equipment ID	DIESEL Volume	DIESEL Credit Amount ($)
2	Dozer 000	1,638.80	81.94
3	Dozer 001	1,461.22	0
4	Dozer 002	1,095.86	0
5	Dozer 003	1,327.41	0
6	TR 000	10,873.92	543.7
7	TR 005	10,128.43	506.42
8	TR 008	8,747.80	349.91
9	TR 012	10,250.13	0

(Historical Tanks Volumes Report - close up of CSV format)

Headers

Header	Description
Equipment ID	The Equipment ID as configured in AdaptIQ
Diesel Volume	The Volume of Diesel dispensed to this equipment over the period of the report
Diesel Credit Amount	The rebate amount for the dispensed Diesel Volume over the reported period

This report focuses only on Equipment Items with "Fuel Tax Rebate Eligible?" toggle enabled. That is why the CSV file doesn't contain all Equipment Items.

47.

47.   Fuel Tax Credit Ineligible Report

Revision History

Rev.	Description
	Before you start
	You need to know about Equipment, Rebate Levels, and Products in AdaptIQ.

47.1.   Overview

The Fuel Tax Credit Ineligible report allows you to calculate the dispensed fuel to tax ineligible Equipment Items over a period of time.

Important data collected by this report

- Dispensed fuel volume to tax ineligible Equipment Items over a period of time.

Report Generation

(*Full View of Fuel Tax Credit Ineligible Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

47.2. Report On Screen View / Report Data

This report doesn't have On Screen View

47.3. Report PDF Format

This report doesn't have PDF format

47.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B
1	Equipment ID	DIESEL
2	Dozer 005	2,513.75
3	Dozer 006	1,665.99
4	Dozer 007	1,661.80
5	TR 001	10,572.02
6	TR 002	10,203.41
7	TR 003	5,511.73

(Historical Tanks Volumes Report - close up of CSV format)

Headers

Header	Description
Equipment ID	The Equipment ID as configured in AdaptIQ
Diesel	The Volume of Diesel dispensed to this equipment over the period of the report

This report focuses only on Equipment Items with "Fuel Tax Rebate Eligible?" toggle disabled. That is why the CSV file doesn't contain all Equipment Items.

48.

48. Dispensing Transaction Analysis Report

Revision History

Rev.	Description
	Before you start
	You need to know about Dispenses in AdaptIQ.
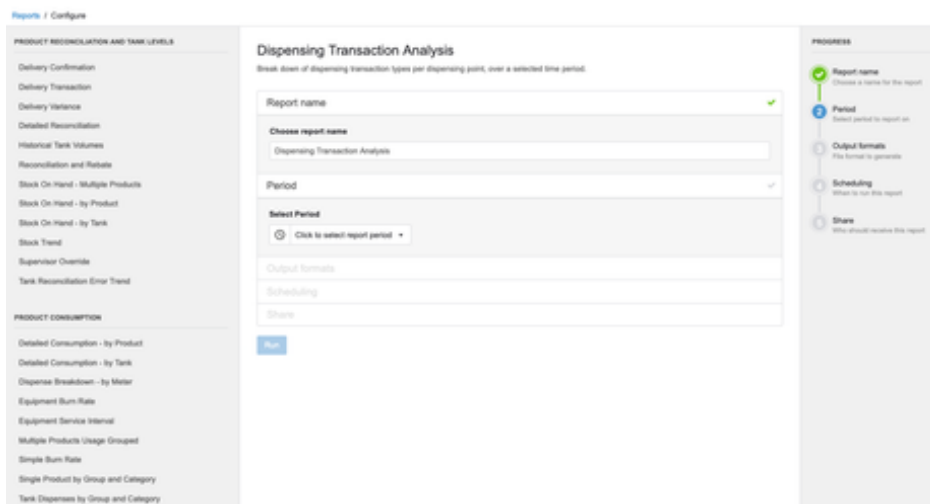
48.1. Overview

The Dispensing Transaction Analysis report allows you to collect data about the dispensed volume and dispense transactions count over a period of time, as well as a breakdown of this data per dispense type.

Important data collected by this report

- Total dispensed volume in the whole site and per dispensing point.
- Total Dispense Transactions count in the whole site and per dispensing point.
- The share of each dispense transaction type

Report Generation

(*Full View of Dispensing Transaction Analysis Report Generation page*)

This report has the following generation parameters:

- Period
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

48.2. Report On Screen View / Report Data

This report shows the following sections from top to bottom.

48.2.1. Site Summary

(Dispensing Transaction Analysis Report - Close up of Summary section)

Actions

- Hover you mouse over a specific pie slice to display information about the dispense type this slice represents
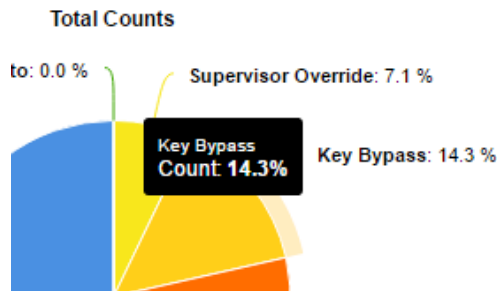
- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action
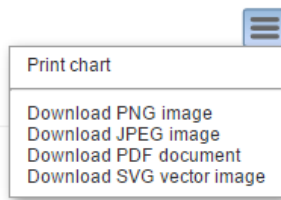
The site summary displays data about the dispenses happened in the overall site over a time period. Dispenses are broken down by the type of dispense (Auto, Manual ..etc). In this section also, you can find important guidance on the total dispenses of each type per dispensing point.

This section consists of the following subsections :

Summary Graph

Totals	Auto	Manual	Error	Unauthorised	Key Bypass	Supervisor Override	Total
Volume	0.00 L	1,648.90 L	6,575.80 L	1,699.70 L	59.50 L	8.30 L	9,992.20 L
Count	0	6	2	3	2	1	14
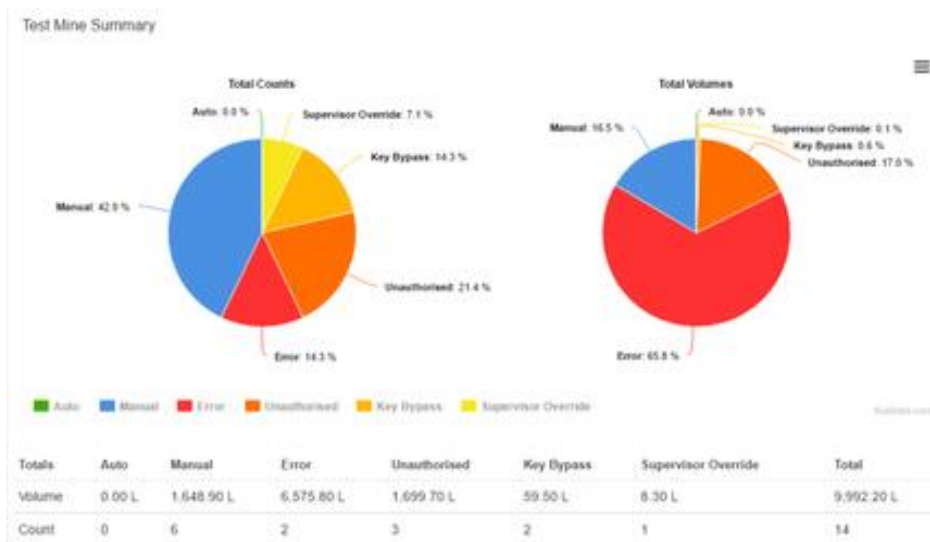
(Dispensing Transaction Analysis Report - Close up of Summary Graph)

- This graph shows the breakdown of Dispensed Volume, and Dispense Transactions count in the whole site over the reported period in the form of 2 pie charts. Each pie chart is sliced into six slices, each represents a type of dispense.
- The legend under the graph shows the colour code for each dispense type.
- The table at the bottom of this section translates the pie charts into numerical format. It sums up the total dispensed volume at this site, and the total number of dispense transaction over the reported period, as well as the share amount of each type of dispense.

Summary by Dispensing Point

Dispensing Point	Auto	Manual	Error	Unauthorised	Key Bypass	Supervisor Override
Test wall MAC 1 (Vol)	0.0%	48.4%	0.0%	49.9%	1.7%	0.0%
Test wall MAC 1 (Count)	0.0%	54.5%	0.0%	27.3%	18.2%	0.0%
Grey AdaptMAC PZ testing 31march (Vol)	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Grey AdaptMAC PZ testing 31march (Count)	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Demo-MAC (Vol)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Demo-MAC (Count)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

(Dispensing Transaction Analysis Report - Close up of Summary by Dispensing Points)

- This section shows a breakdown to the dispensed volume, and the dispense transactions count per dispensing point.
- For each dispensing point there are two rows, one for the dispensed volume breakdown per dispense type, and one for the dispense transaction count breakdown per dispense type. All the numbers are represented as a percentage of the totals.

48.2.2. Dispensing Point Analysis

This section shows dispense transactions analysis for a specific dispensing point. This section is repeatable, according to the number of dispensing points.

Test wall MAC 1 Summary ▲

Totals	Auto	Manual	Error	Unauthorised	Key Bypass	Supervisor Override	Total
Volume	0.00 L	1,648.90 L	0.00 L	1,699.70 L	59.50 L	0.00 L	3,408.10 L
Count	0	6	0	3	2	0	11
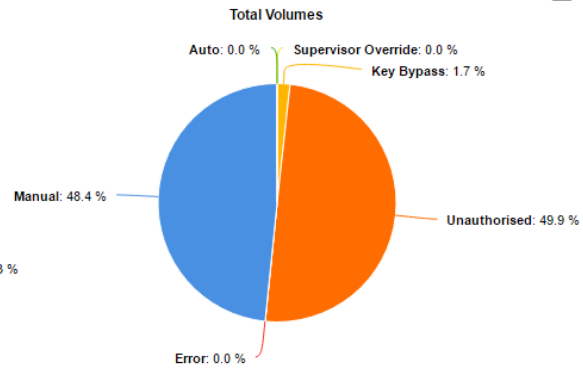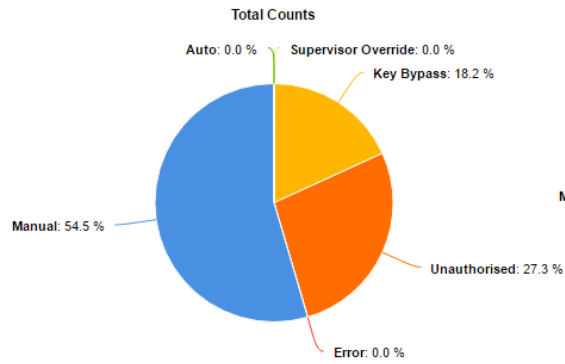
Total Counts

Auto: 0.0 %   Supervisor Override: 0.0 %
Key Bypass: 18.2 %
Manual: 54.5 %
Unauthorised: 27.3 %
Error: 0.0 %

Total Volumes

Auto: 0.0 %   Supervisor Override: 0.0 %
Key Bypass: 1.7 %
Manual: 48.4 %
Unauthorised: 49.9 %
Error: 0.0 %

■ Auto ■ Manual ■ Error ■ Unauthorised ■ Key Bypass ■ Supervisor Override

fluidintel.com

Test wall MAC 1 Dispense Volumes

■ Auto ■ Manual ■ Error ■ Unauthorised ■ Key Bypass ■ Supervisor Override

fluidintel.com

Test wall MAC 1 Dispense Counts

■ Auto ■ Manual ■ Error ■ Unauthorised ■ Key Bypass ■ Supervisor Override

fluidintel.com

(Dispensing Transaction Analysis Report - Close up of Dispensing Point Analysis)

Actions

- Click on the anchor (upward arrow) next to the dispensing point name, to scroll to the top of the page

Test wall MAC 1 Summary ▲

- Hover you mouse over a specific pie slice to display information about the dispense type this slice represents

Total Counts

Auto: 0.0 %   Superviso

Manual
Count: 54.5%

%
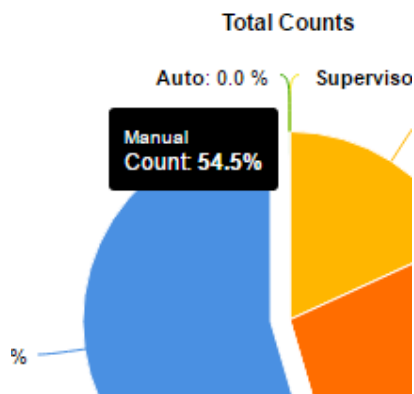
- Hover Your mouse over a part of the bar to display information about this transaction type
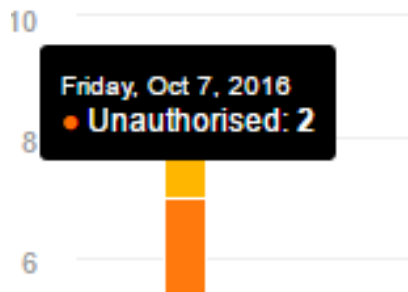
10

Friday, Oct 7, 2016
● Unauthorised: 2

8

6

- Print or download the chart in an image format using the top right menu. Click on the menu icon, and select the desired action

Print chart

Download PNG image
Download JPEG image
Download PDF document
Download SVG vector image
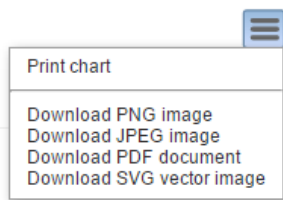
This section consists of 4 subsections as follows:

Totals Graph

- This graph shows the breakdown of Dispensed Volume, and Dispense Transactions count from this dispensing point over the reported period in the form of 2 pie charts. Each pie chart is sliced into six slices, each represents a type of dispense.
- The legend under the graph shows the colour code for each dispense type.
- The table at the top of this section translate the pie charts into numerical format. It sums up the total dispensed volume, and the total number of dispense transactions from this dispensing point over the reported period, as well as the share amount of each type of dispense.

Dispense Volumes Graph

- This graph shows the dispensed volume from this dispensing volume over the reported period in the form of a column chart. The X axis represents the time, while the Y Axis represents the volume in litres.
- Each column is partitioned by a colour code, where each colour represents a dispense type.
- The legend at the bottom of the graph explain the colour codes.

Dispense Volumes Graph

- This graph shows the dispense transaction count from this dispensing volume over the reported period in the form of a column chart. The X axis represents the time, while the Y Axis represents the count of the dispense transactions.
- Each column is partitioned by a colour code, where each colour represents a dispense type.
- The legend at the bottom of the graph explain the colour codes.

48.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

48.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Dispensing Point	Timestamp	AUTO Count	AUTO Volume	MANUAL Count	MANUAL Volume	ERROR Count	ERROR Volume	Unauthorised Count	Unauthorised Volume	KEY_BYPASS Count	KEY_BYPASS Volume	SUP_OVERRIDE Count	SUP_OVERRIDE Volume
2	Test wall MAC 1	4/10/2016 1:00	0	0	5	1586	0	0	2	245.7	2	59.5	0	0
3	Test wall MAC 1	19/10/2016 01:00	0	0	0	0	0	0	1	1454	0	0	0	0
4	Test wall MAC 1	18/12/2016 01:00	0	0	1	62.9	0	0	0	0	0	0	0	0
5	Grey AdaptMAC PZ testing 31march	15/11/2016 01:00	0	0	0	0	2	6575.8	0	0	0	0	0	0

(Dispensing Transaction Analysis Report - Close up of CSV format)

49. Group Changes Audit Log Report

Revision History

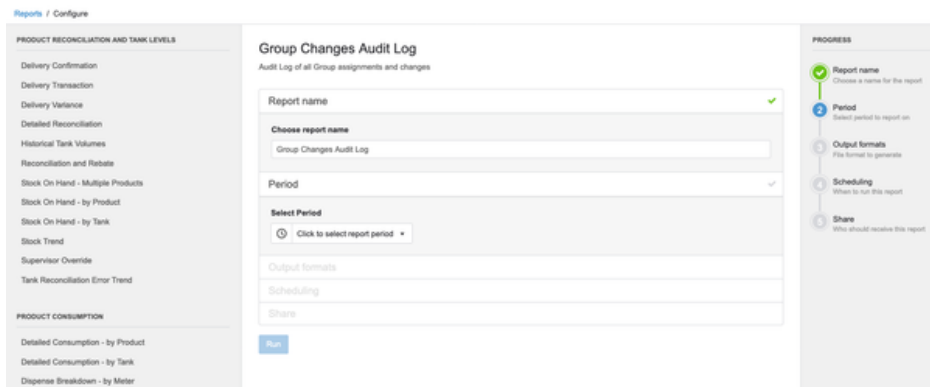| Rev.	Description
	Before you start
	You need to know about Users, and Groups in AdaptIQ.

49.1. Overview

The report lists any changes happened to subscribing or unsubscribing users to groups

Important data collected by this report

- Users groups subscription changes

Report Generation

(*Full View of Group Changes Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

49.2.   Report On Screen View / Report Data

This report doesn't have On Screen View

49.3.   Report PDF Format

This report doesn't have PDF format

49.4.   Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E
1	Changed at	Changed by	Action	User	Group
2	23/01/2017 13:04	Demo.Admin	Added	bruce.bam	Group1
3	23/01/2017 13:06	Demo.Admin	Added	brett.johnson	Group2
4	23/01/2017 13:07	Demo.Admin	Added	allanking	Shell
5	23/01/2017 13:19	Demo.Admin	Removed	allanking	Group2

(Group Changes Audit Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Changed By	The name of AdaptIQ user who made the change

Action	The taken action. Added: If the user has been added to a specific group Removed: If the user has been removed from the group.
User	The user for which the group subscription has been changed
Group	The group for which a change has happened (a user has been added or removed)

50. Equipment Audit Log Report

Revision History

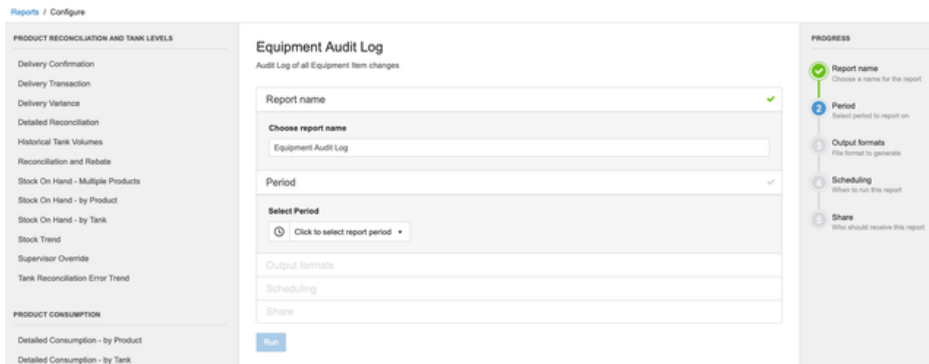| Rev.	Description
	Before you start
	You need to know about Equipment in AdaptIQ.

50.1. Overview

The report lists any changes happen to an Equipment Item.

Important data collected by this report

- Equipment Items' settings changes

Report Generation

(*Full View of Equipment Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

50.2. Report On Screen View / Report Data

This report doesn't have On Screen View

50.3. Report PDF Format

This report doesn't have PDF format

50.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

(Equipment Audit Log Report - close up of CSV format)

Headers

Header	Description

Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Code	The ID of the Equipment Item the change has been made to
Changed By	The name of AdaptIQ user who made the change
Field	The field that could be affected by the change
Original Value	The original value of this field before the change
Updated Value	The new value of this field after the change

51.   Field User Audit Log Report

Revision History

Rev.	Description
	Before you start

You need to know about Field Users in AdaptIQ.

51.1.   Overview

The report lists any changes happen to any Field User's settings

Important data collected by this report

- Updating Field Users settings

Report Generation

(*Full View of Field User Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

51.2.   Report On Screen View / Report Data

This report doesn't have On Screen View

51.3.   Report PDF Format

This report doesn't have PDF format

51.4.   Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F
1	Changed at	Name	Changed by	Field	Original Value	Updated Value
2	23/01/2017 13:00	Adam Aya	Demo.Admin	company	Bar	Test
3	23/01/2017 13:53	Emma Goodman	Demo.Admin	company		Test
4	23/01/2017 13:53	Emma Goodman	Demo.Admin	department		
5	23/01/2017 13:53	Emma Goodman	Demo.Admin	erp_reference		

(Field User Audit Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Name	The Field User the change has been made to
Changed By	The name of AdaptIQ user who made the change
Field	The field that could be affected by the change
Original Value	The original value of this field before the change
Updated Value	The new value of this field after the change

52. Tank Audit Log Report

Revision History

Rev.	Description
	Before you start

You need to know about Tanks in AdaptIQ.

52.1. Overview

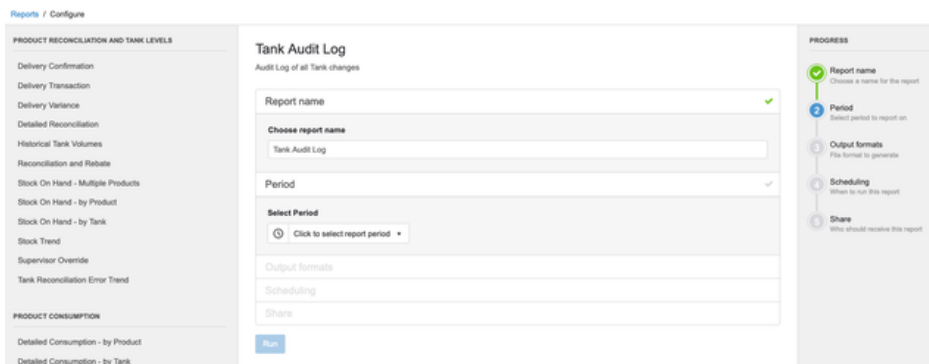The report lists any changes happen to Tanks' settings.

Important data collected by this report

- Changes in Tanks' settings

Report Generation

(*Full View of Tank Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

52.2.   Report On Screen View / Report Data

This report doesn't have On Screen View

52.3.   Report PDF Format

This report doesn't have PDF format

52.4.   Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F
1	Changed at	Code	Changed By	Field	Original Value	Updated Value
2	23/01/2017 14:11	LEMINGTON_DIESEL_TANK_4	Demo.Admin	erp_reference		
3	23/01/2017 14:11	LEMINGTON_DIESEL_TANK_4	Demo.Admin	alarm_low_low	5	10
4	23/01/2017 14:11	LEMINGTON_DIESEL_TANK_4	Demo.Admin	is_in_calculated_transaction_mode		FALSE
5	23/01/2017 14:11	LEMINGTON_DIESEL_TANK_4	Demo.Admin	is_in_reconciliation_mode		FALSE
6	23/01/2017 14:13	LEMINGTON_DIESEL_TANK_19	Demo.Admin	min_ops		1000
7	23/01/2017 14:13	LEMINGTON_DIESEL_TANK_19	Demo.Admin	max_ops		49500
8	23/01/2017 14:13	LEMINGTON_DIESEL_TANK_19	Demo.Admin	erp_reference		
9	23/01/2017 14:13	LEMINGTON_DIESEL_TANK_19	Demo.Admin	is_in_calculated_transaction_mode		FALSE
10	23/01/2017 14:13	LEMINGTON_DIESEL_TANK_19	Demo.Admin	is_in_reconciliation_mode		FALSE

(Tank Audit Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Code	The ID of the Tank the change has been made to
Changed By	The name of AdaptIQ user who made the change
Field	The field that could be affected by the change
Original Value	The original value of this field before the change
Updated Value	The new value of this field after the change

53.   Movement Audit Log Report

Revision History

Rev.	Description
	Table of Contents • Overview • Report On Screen View / Report Data • Report PDF Format • Report CSV Format Before you start You need to know about Movements-Old in AdaptIQ. ### 53.1. Overview The report lists any manual edit happen to a movement transaction after being created. Important data collected by this report • Manual edits to Movements Transactions **Report Generation** (*Full View of Movement Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

53.2.   Report On Screen View / Report Data

This report doesn't have On Screen View

53.3.   Report PDF Format

This report doesn't have PDF format

53.4.   Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G
1	Movement ID	Movement Type	Changed At	Changed By	Field	Original Value	Updated Value
2	224269	DispensingTransaction	29/12/2016 13:29	rob.cornish	Source	Tank 39-94	Tank 50-105
3	224269	DispensingTransaction	29/12/2016 13:40	rob.cornish	Source	Tank 50-105	Tank 39-94
4	224269	DispensingTransaction	29/12/2016 13:40	rob.cornish	Product	Diesel	Coolant
5	224269	DispensingTransaction	29/12/2016 13:43	rob.cornish	Volume	-2,000.00 L	-2,001.00 L
6	224269	DispensingTransaction	29/12/2016 13:56	rob.cornish	Volume	-2,001.00 L	-2,000.00 L
7	224269	DispensingTransaction	29/12/2016 14:12	rob.cornish	Source	Tank 39-94	Tank 66-121
8	230945	DeliveryTransaction	23/01/2017 14:24	Demo.Admin	Volume	2,000.00 L	2,100.00 L
9	224270	DispensingTransaction	23/01/2017 14:25	Demo.Admin	Target	C Track Maintenance Vehicle	Bus 7 NORTH
10	224270	DispensingTransaction	23/01/2017 14:25	Demo.Admin	Zone	MAINTENANCE	MINING

(Movement Audit Log Report - close up of CSV format)

Headers

Header	Description
Movement ID	The ID of the updated Movement
Movement Type	The type of Movement

Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Changed By	The name of AdaptIQ user who made the change
Field	The field that could be affected by the change
Original Value	The original value of this field before the change
Updated Value	The new value of this field after the change

54. Authorisation Audit Log Report

Revision History

Rev.	Description
	Before you start
	You need to know about Authorisation Areas in AdaptIQ.

54.1. Overview

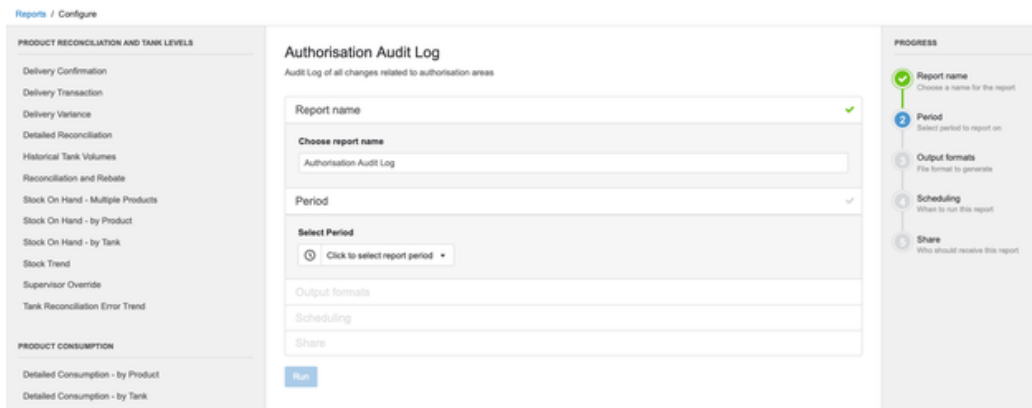The report lists any changes happened to adding or removing an Equipment Item to or from an Authorisation Area.

Important data collected by this report

- Any change to the Authorisation Areas (Add/delete Equipment)

Report Generation

(*Full View of Authorisation Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

54.2. Report On Screen View / Report Data

This report doesn't have On Screen View

54.3. Report PDF Format

This report doesn't have PDF format

54.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D
1	Changed at	Authorisation area	Changed By	Event
2	19/12/2016 12:27	Lighties	Demo.Admin	Added Equipment item '974'
3	19/12/2016 12:27	Lighties	Demo.Admin	Added Equipment item 'DZ529'
4	20/12/2016 13:59	Heavies	Demo.Admin	Added Equipment item 'pz456'
5	20/12/2016 13:59	Lighties	Demo.Admin	Removed Equipment item 'DO767'
6	20/12/2016 13:59	Lighties	Demo.Admin	Removed Equipment item 'H702'
7	20/12/2016 13:59	Lighties	Demo.Admin	Removed Equipment item 'DO769'
8	20/12/2016 13:59	Lighties	Demo.Admin	Removed Equipment item 'DO766'

(Authorisation Audit Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Authoristion Area	The Authorisation Area the change made to
Changed By	The name of AdaptIQ user who made the change
Event	The taken action

55. Field Hardware Audit Log Report

Revision History

Rev.	Description
	Table of Contents

- Overview
- Report On Screen View / Report Data
- Report PDF Format
- Report CSV Format

Before you start

You need to know about MCU, and SCU in AdaptIQ.

55.1. Overview

The report lists any changes happened to MCUs, SCUs, and Meters

Important data collected by this report

- MCU, SCU , and Meters settings changes

Report Generation

(*Full View of Field Hardware Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

55.2. Report On Screen View / Report Data

This report doesn't have On Screen View

55.3. Report PDF Format

This report doesn't have PDF format

55.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H
1	Changed at	Device Type	ID	Changed By	Action	Field	Original Value	Updated Value
2	27/12/2016 21:39	Mcu	RobC		update	last_config_fetch	2016-12-27 10:25:23 UTC	2016-12-27 10:39:49 UTC
3	27/12/2016 21:39	Mcu	SMTest		update	last_config_fetch	2016-12-27 10:25:25 UTC	2016-12-27 10:39:49 UTC
4	27/12/2016 21:39	Mcu	Demo-MAC		update	last_config_fetch	2016-12-27 10:25:31 UTC	2016-12-27 10:39:50 UTC
5	31/12/2016 23:55	Mcu	1000.44.1		update	last_config_fetch	2016-12-31 12:39:44 UTC	2016-12-31 12:55:14 UTC
6	31/12/2016 23:55	Mcu	ScottMAC		update	last_config_fetch	2016-12-31 12:39:44 UTC	2016-12-31 12:55:14 UTC
7	31/12/2016 23:55	Mcu	1000.236.1		update	last_config_fetch	2016-12-31 12:39:44 UTC	2016-12-31 12:55:14 UTC
8	31/12/2016 23:55	Mcu	RobC		update	last_config_fetch	2016-12-31 12:39:44 UTC	2016-12-31 12:55:18 UTC
9	31/12/2016 23:55	Mcu	SMTest		update	last_config_fetch	2016-12-31 12:39:44 UTC	2016-12-31 12:55:20 UTC
10	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	code		MAC2_M1
11	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	description		MAC2 M1
12	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	meter_model		
13	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	meter_type		dispensing
14	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	comms_method_id		1
15	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	tank_id		247
16	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	scu_id		63
17	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	input_address		
18	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	output_address		
19	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	calibration		
20	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	is_enabled		TRUE
21	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	erp_reference		
22	14/12/2016 10:32	Meter	MAC2_M1	Demo.Admin	create	site_id		7

(Field Hardware Audit Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Device Type	The type of the device the change has been made to (i.e. MCU)
ID	The type of the device the change has been made to
Changed By	The name of AdaptIQ user who made the change. In case of automatic actions, this field is empty.
Action	The taken action.
Field	The field that could be affected by the change
Original Value	The original value of this field before the change
Updated Value	The new value of this field after the change

56.   User Audit Log Report

Revision History

Rev.	Description

Before you start

You need to know about Users in AdaptIQ.

56.1.   Overview

The report lists any changes/activities reported by users

Important data collected by this report

- User's settings changes
- Last Login Date/Time
- Current Login Date/Time
- Login count

Report Generation

(*Full View of User Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

56.2. Report On Screen View / Report Data

This report doesn't have On Screen View

56.3. Report PDF Format

This report doesn't have PDF format

56.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F
1	Changed at	User Name	Changed by	Field	Original Value	Updated Value
2	2/12/2016 8:48	Demo.Admin		last_sign_in_at	2016-11-30 01:55:31 UTC	2016-11-30 02:01:00 UTC
3	2/12/2016 8:48	Demo.Admin		current_sign_in_at	2016-11-30 02:01:00 UTC	2016-12-01 21:48:32 UTC
4	2/12/2016 8:48	Demo.Admin		current_sign_in_ip	192.168.254.246	192.168.254.100
5	2/12/2016 8:48	Demo.Admin		sign_in_count	22	23
6	6/12/2016 16:20	admin_user		failed_attempts	1	2
7	6/12/2016 16:21	diego.nolde	rob.cornish	name		Diego N
8	6/12/2016 16:21	diego.nolde	rob.cornish	location		
9	6/12/2016 16:21	diego.nolde	rob.cornish	phone		

(Users Audit Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
User Name	The User Name the change has been made to
Changed By	The name of AdaptIQ user who made the change In case of automatic actions, this field is empty.
Field	The field that could be affected by the change
Original Value	The original value of this field before the change
Updated Value	The new value of this field after the change

57. Field User Access Card Audit Log Report

Revision History

Rev.	Description
	Before you start

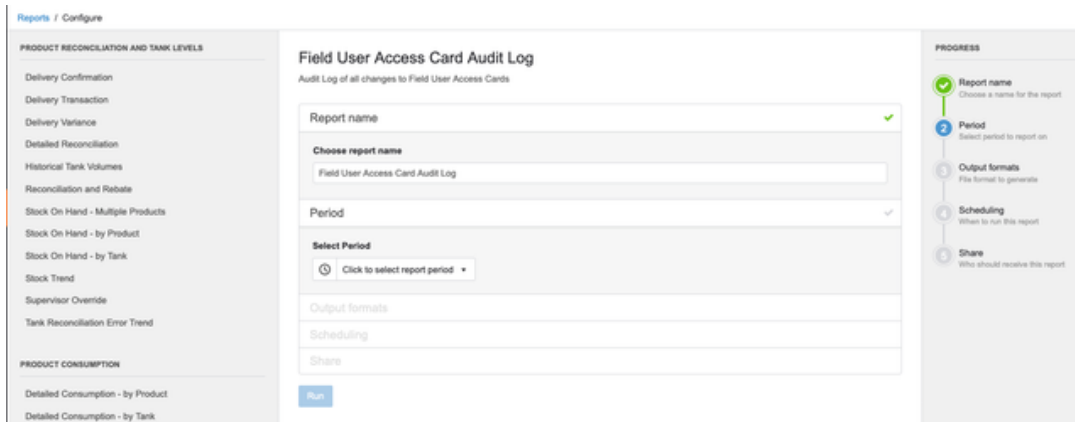You need to know about Field Users in AdaptIQ.

57.1. Overview

The report lists any changes happened to the Field User Access Card

Important data collected by this report

- Access Card add/remove actions

Report Generation

(*Full View of Field User Access Card Audit Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats

www.veridapt.com

- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

57.2.   Report On Screen View / Report Data

This report doesn't have On Screen View

57.3.   Report PDF Format

This report doesn't have PDF format

57.4.   Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F
1	Changed at	Changed By	Action	Field User Name	Facility Code	Card ID
2	18/07/2016 16:10	rob.cornish	added	Adam Bohr	111	111QA
3	18/07/2016 16:12	rob.cornish	added	Adam Birrel	111	112QA
4	18/07/2016 16:12	rob.cornish	added	Anthony Abbot	111	113QA
5	18/07/2016 16:15	rob.cornish	removed	Anthony Abbot	111	113QA
6	18/07/2016 16:16	rob.cornish	added	Anthony De Brito	111	114QA
7	18/07/2016 16:16	rob.cornish	removed	Anthony De Brito	111	114QA
8	18/07/2016 16:28	rob.cornish	added	User Field918	678	7788

(Field User Access Card Audit Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Changed By	The name of AdaptIQ user who made the change

Action	The taken action. Added: If an access card has been added to this Field User Removed: If an access card has been remover from this Field User
Field User Name	The user for which the Access Card has been changed
Facility Code	The facility code related to this access card
Card ID	The Card ID that had been added or removed

58. Duplicate Movements Report

Revision History

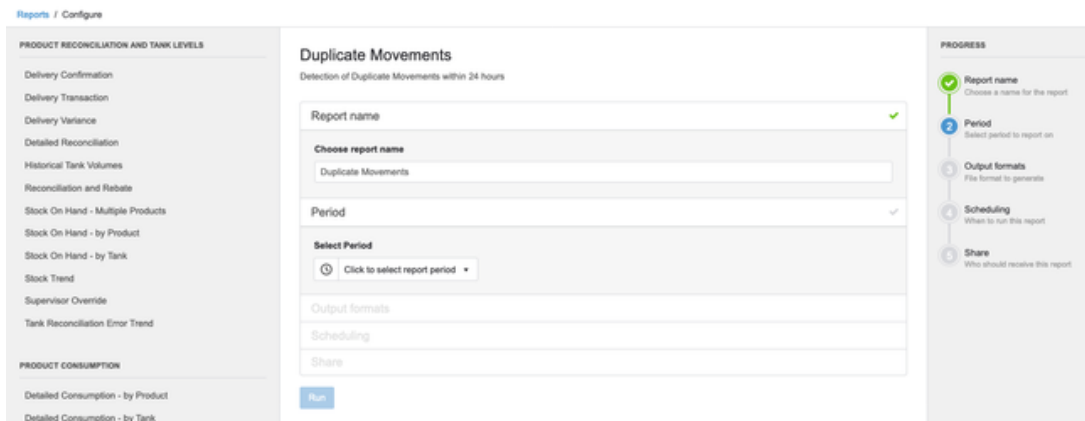| Rev.	Description
	Before you start
	You need to know about Movements in AdaptIQ.

58.1. Overview

The Duplicate Movements report allows you to collect information about duplicate Movements that happened over a period of time. Two movements are considered as duplicates if they share the same information and occurred within 24 hours from each other.

This report is created for audit purposes and is unlikely to return any data.

Important data collected by this report

- Duplicated Deliveries
- Duplicated Dispenses
- Duplicate Transfers

Report Generation

(*Full View of Duplicate Movements Report Generation page*)

This report has the following generation parameters:

- Period
- Output Formats
- Scheduling
- Share

For more information on how to configure these parameters, please visit Generate New Report page.

58.2.   Report On Screen View / Report Data

This report shows the following sections from top to bottom.

58.2.1.   Duplicate Delivery/Dispense/Transfer Movements

This section shows a list of Duplicated transaction for one type of Movements in a table format. The report includes three of This section for each type (Delivery, Dispense, and Transfer)

Duplicate Dispense Movements

First ID	First Collected At	Second ID	Second Collected At	Docket Number	Product	Volume	Target	Source	Meter
224217	19/12/2016 11:35	224226	19/12/2016 13:20		Coolant	-110.00 L	Coates Hire Lighting Plant	Tank 39-94	

(Duplicate Movements Report - Close up of Duplicate Movements section)

Headers

Header	Description
First ID	The ID of the first duplicate transaction
First Collected At	The time of the first duplicate transaction in DD/MM/YYYY HH:MM format
Second ID	The ID of the second duplicate transaction
Second Collected At	The time of the second duplicate transaction in DD/MM/YYYY HH:MM format
Docket Number	The docket number of the transaction if any
Product	The product the transaction had been made to

Volume	The delivered/dispensed/transferred volume in litres
Target	The ID of the target Tank if any
Source	The ID of the source Tank if any
Meter	The meter associated with the transaction if any

58.3. Report PDF Format

It shows the same structure as the On Screen format in printable form.

58.4. Report CSV Format

This format is mainly used by third party applications as a form of integration, The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G	H	I	J
1	First ID	First Collected At	Second ID	Second Collected At	Docket Number	Product	Volume	Target	Source	Meter
2	224217	19/12/2016 11:35	224226	19/12/2016 13:20		Coolant	-110	Coates Hire Lighting Plant	Tank 39-94	

(Duplicate Movements Report - Close up of CSV format)

59. Group Permission Changes Log Report

Revision History

Rev.	Description
	Before you start
	You need to know about Groups in AdaptIQ.

59.1. Overview

The report lists any changes happens to group's permissions

Important data collected by this report

- Creating New Group
- Changing Group access level for one or more items

Report Generation

(*Full View of Group Permission Changes Log Report Generation page*)

This report has the following generation parameters:

- Period
- Output formats
- Scheduling

- Share

For more information on how to configure these parameters, please visit Generate New Report page.

59.2. Report On Screen View / Report Data

This report doesn't have On Screen View

59.3. Report PDF Format

This report doesn't have PDF format

59.4. Report CSV Format

This format is the only format available for this report. The report data is represented as shown below

Please note that, the below table has been visually formatted to be user friendly.

	A	B	C	D	E	F	G
1	Changed at	Group Name	Action	Changed by	Item Changed	Original Value	Updated Value
2	24/01/2017 08:56	Group1	Create	Demo.Admin	Name		Group1
3	24/01/2017 08:56	Group1	Create	Demo.Admin	Id		51
4	24/01/2017 08:57	Group1	Create	Demo.Admin	Tank farm permission	All Other Tanks (OFF)	All Other Tanks (ON)
5	24/01/2017 08:57	Group1	Create	Demo.Admin	Tank farm permission	Link Oil Tanks (OFF)	Link Oil Tanks (ON)
6	24/01/2017 08:57	Group1	Update	Demo.Admin	Access dashboard	No Access	Viewer
7	24/01/2017 08:57	Group1	Update	Demo.Admin	Access storage	No Access	Viewer
8	24/01/2017 08:58	Group2	Create	Demo.Admin	Name		Group2
9	24/01/2017 08:58	Group2	Create	Demo.Admin	Id		52
10	24/01/2017 08:58	Group2	Create	Demo.Admin	Tank farm permission	All Other Tanks (OFF)	All Other Tanks (ON)
11	24/01/2017 08:58	Group2	Create	Demo.Admin	Tank farm permission	Heavy Fuel Facility (OFF)	Heavy Fuel Facility (ON)
12	24/01/2017 08:58	Group2	Update	Demo.Admin	Access dashboard	No Access	Editor
13	24/01/2017 08:58	Group2	Update	Demo.Admin	Access equipment	No Access	Editor
14	24/01/2017 08:58	Group2	Update	Demo.Admin	Access load plan	No Access	Editor

(Group Permission Changes Log Report - close up of CSV format)

Headers

Header	Description
Changed at	Date/Time the change is made This field is in DD/MM/YYY HH:MM format
Group Name	The Group the change has been made to

Action	Create: If the group is newly created, and the permission is newly assigned Update: If the permission is updated
Changed By	The name of AdaptIQ user who made the change
Item Changed	The field that could be affected by the change
Original Value	The original value of this field before the change
Updated Value	The new value of this field after the change

60.   Alarms

Revision History

Rev.	Description

60.1.   Overview

Alarms indicate anomalies in the operation of AdaptFMS; AdaptIQ can detect different types of anomalies

and present them in the alarms section. To access this section, click on the icon 🔔 Alarms from the left navigation bar.

(Full View of the Alarms page)

This section is organised into two pages: Alarms, and Alarm Subscriptions, which you can navigate between by using the tabs at the top of the page.

The **Alarms** page presents a list of alarms, while the **Alarm Subscriptions** page shows panels summing up which types of email notifications the user has subscribed to. The Alarms page will be displayed by default.

It's also possible to access this section from any AdaptIQ page by clicking on the alarm icon on the top bar, then clicking the View all active alarms if you want to access the Alarms page, otherwise click on Manage alarm subscriptions to go to the Alarm subscriptions page.

This alarm widget also allows to get an overview of the alarms in the system. It displays the number of active and unacknowledged alarms for each subscription, and for all system alarms.

61. Alarms list

Revision History

Rev.	Description

61.1. Overview

61.1.1. List page

When you access the alarm section you'll land on the alarm list page where all alarms are listed. You can custom this page by choosing the columns to show and filter the results. These actions are described below.

(Full view of the Alarm list page)

61.1.2. Alarm view page

This page gives specific details for each individual alarm. You can access it by clicking on the row you're interested in
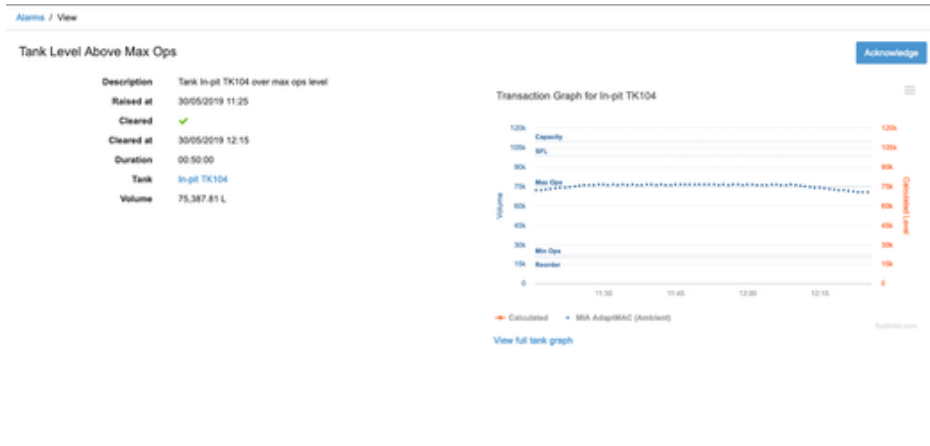
(Alarm View Page)

61.2. Actions

This page has the following actions:

Acknowledge

This button is located at the top right of the page. If no alarm is selected the button appears inactive and you won't be able to click on it.

If you want to acknowledge alarms, first you have to select the one(s) you want to acknowledge. To do so, you can either select the rows one by one by clicking the checkbox on the left of the or use the checkbox in the headers.

The following menu appears and allows you to select at one time all unacknowledged alarms on the page or in total, you can also choose to clear your selection.

Once you have selected the alarms, click on acknowledge alarms button which has become active and now specifies the number of alarms you're about to acknowledge

Acknowledge 2 alarms

A confirmation message will appear briefly and the status of the alarm will become acknowledged.
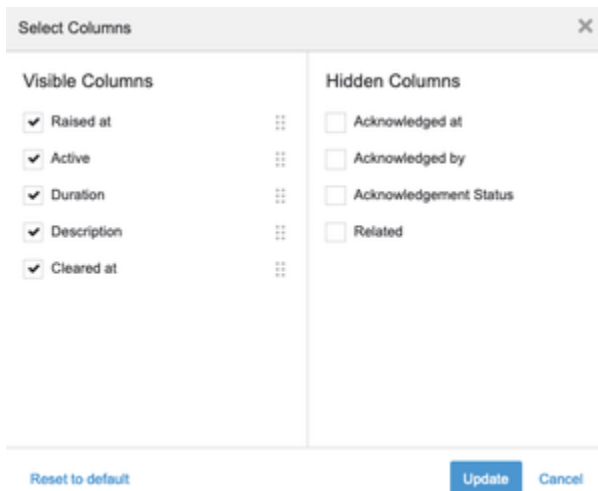
2 alarms successfully acknowledged ✕

There is another location where you can acknowledge an alarm : in the view page if the alarm is not yet acknowledged, the button will appear then you just have to click on it.

Select columns

You can use this feature to add a custom look to the list of Alarms. Please refer to selectable column feature for more details.

(Close up of the Alarms columns)
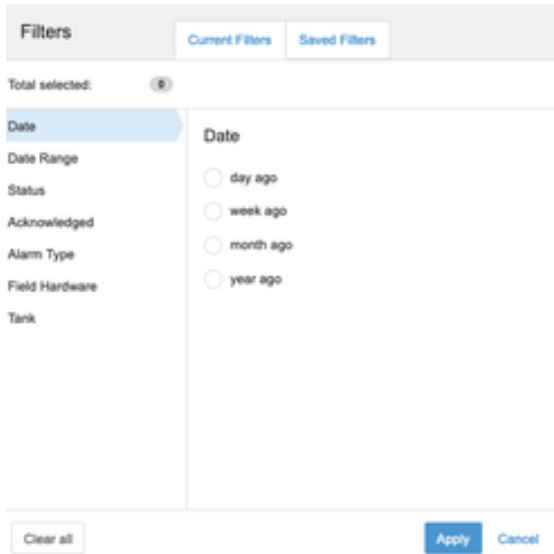
The following table shows the available columns. Blue headers are the default one

Headers	Description
Raised at	Date and time the alarm has been raised
Active	Status of the alarm active or cleared
Duration	For how long the alarm has been active
Description	A short description of the alarm
Cleared at	Date and time the alarm has been cleared
Acknowledged at	Date and time the alarm has been acknowledge
Acknowledged by	Name of the user who acknowledged the alarm

Acknowledgement status	Either acknowledge or not acknowledge
Related	The item related to this alarm

Filters

Click on to open the filter dialog box. For more details about the filters feature and how to save your favourite filters please refer to Filtering Records .

(Close up of the Alarm Filters)

The following table shows the available filters criteria.

Filter criteria	Description
Date	Select between day, week, month or year ago
Date range	Select the period of time you are interested in
Status	Select to filter by active alarms
Acknowledged	Filter by acknowledged status
Alarm Type	Select the alarm type(s). For more details please refer to the Alarm type page
Field Hardware	Filter by field hardware
Tank	Filter by tank

Note: once you've applied filters, they appear at the top of the list. You can easily delete these filters by clicking on their crosses.

(Alarm list page with filters applied)

CSV Export

You can export the list of alarms displayed in the list view to a csv file, by clicking on the, located at the top right of the page.

The exported csv file acts as a log file to be sent over email for system troubleshooting.

62.   Alarms subscription page

Revision History

Rev.	Description

62.1.   Overview

All the alarm subscriptions are shown in panels, the panel borders will be green if there are no active alarms that match the subscription's criteria, otherwise the borders will be red indicating there are one or more active alarms matching the subscriptions criteria.

A single active alarm may match the criteria of multiple subscriptions, resulting in all their borders being displayed in red.
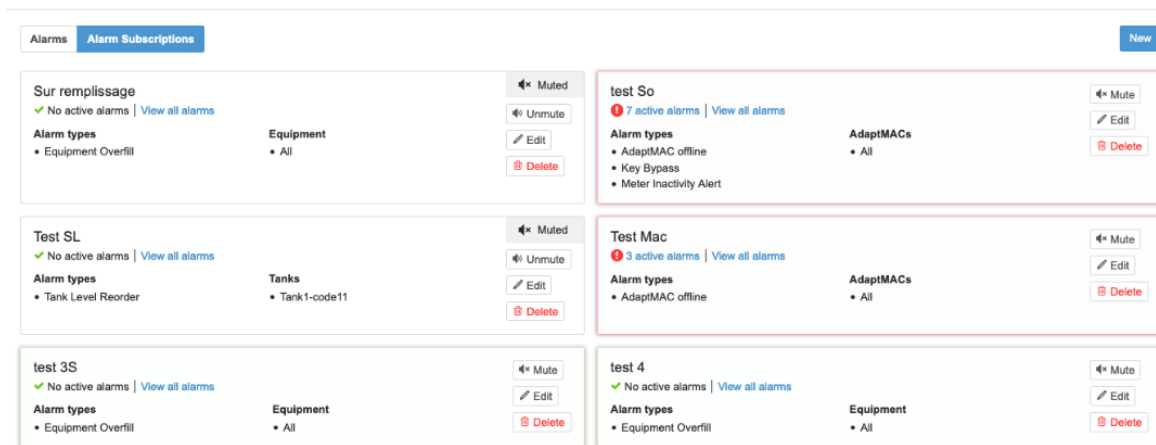
(Full view of Alarm Subscriptions page)

62.2.   Manage alarms subscriptions

Add a new alarm subscription

Click on the **New** button on the right top of the page. Alarms (don't say alarm types, alarm types here) are sorted into three categories: tanks, equipment items, or field hardware.

Alerts / Alarm Subscriptions / New Alarm Subscription

New Alarm Subscription

Storage alarms

Configure notifications for Tank alarms, such as inventory levels, out of comms, and overfill.

Configure

Equipment alarms

Configure notifications for Equipment Item alarms, such as equipment overfill.

Configure

Field hardware alarms

Configure notifications for Field Hardware alarms, such as key bypass and device offline.

Configure

Click on the category you want, then a new page will open to start the Alarm subscription Configuration Wizard. This page is divided into two main sections: Alarm Types and Progress Indicator as shown below

New Alarm Subscription

Alarm types	✓

Select alarm types

Inventory Management
- ☐ Tank Leak
- ☐ Tank Level Over SFL
- ☐ Tank Level High High
- ☐ Tank Level High
- ☐ Tank Level Reorder
- ☐ Tank Level Low
- ☐ Tank Level Low Low
- ☐ Tank Level Below Min Ops
- ☐ Tank Level Above Max Ops

System Health
- ☐ Tank Out of Comms - Warning
- ☐ Tank Out of Comms - Alert
- ☐ GTS stopped
- ☐ RAS stopped
- ☐ Tank Reading Out of Bounds
- ☐ Static Tank Reading
- ☐ Tank Invalid Strapping Table Reading

Transactions
- ☐ Tank Overfill

Tanks

Subscription name

Sharing

Subscribe   Cancel

- Select one or more alarm types from Alarm Types section, the progress indicator will be updated with the number of steps needed to create this new subscription, with Step selected
- Select the relevant tank or field hardware depending on the category
- Give your subscription a name
- Share the alarm with other AdaptIQ users or specific email addresses, if you require, by clicking the 'Sharing' panel to toggle it open, then click the drop-down list shown to open the User selection widget.

Mute an alarm subscription

To mute an alarm subscription, simply click on the Mute button in the relevant panel. When you mute a subscription, you are only muting the *emails* for *yourself*, this means the alarms will still be raised and other users this subscription is shared, with will still receive their email notifications.

Test SL
✓ No active alarms | View all alarms

Alarm types	Tanks
• Tank Level Reorder	• Tank1-code11

◀× Mute
✎ Edit
🗑 Delete

Subscription muted ✕

A confirmation message appears briefly and "Muted" is now written at the right top corner of the panel.

Test SL

✔ No active alarms | View all alarms

🔇× Muted

🔊 Unmute

✏ Edit

🗑 Delete

Alarm types
- Tank Level Reorder

Tanks
- Tank1-code11

If you want to unmute the subscription, click on Unmute, the message

Subscription no longer muted ✕

appears briefly.

Edit an alarm subscription

To edit an alarm subscription click on Edit in the relevant panel, the Alarm subscription Configuration Wizard will open. Do the changes required and click on Update to save the changes, or Cancel.

Edit Alarm Subscription

Alarm types ✔

Select alarm types

Inventory Management
- ☐ Tank Leak
- ☐ Tank Level Over SFL
- ☐ Tank Level High High
- ☐ Tank Level High
- ☐ Tank Level Reorder
- ☐ Tank Level Low
- ☐ Tank Level Low Low
- ☐ Tank Level Below Min Ops
- ☐ Tank Level Above Max Ops

System Health
- ☐ Tank Out of Comms - Warning
- ☑ Tank Out of Comms - Alert
- ☐ GTS stopped
- ☐ RAS stopped
- ☐ Tank Reading Out of Bounds
- ☐ Static Tank Reading
- ☐ Tank Invalid Strapping Table Reading

Transactions
- ☐ Tank Overfill

Tanks ✔

Select a set of tanks

📷 ○ All tanks ◉ Specific tanks (6 selected) ▾

"All tanks" includes any tanks created in the future

Delete an alarm subscription

If you want to delete an alarm subscription, click on the Delete button in the relevant panel. Once confirmed, the panel will disappear from the page. When you delete an alarm subscription, you are removing it for *all* users it's shared with, not only yourself (unlike muting).

test 3S

✔ No active alarms | View all alarms

🔊× Mute

✏ Edit

🗑 Delete

Alarm types
- Equipment Overfill

Equipment
- All

63. Alarms types

Revision History

Rev.	Description

63.1. Overview

You can use alarm types to filter your results in the Alarm list page and to define criteria when you create an alarm subscription. Below is a description of the different types of alarms in AdaptIQ.

63.2. Inventory management alarms

The System Administrator can define these alarms for each tank based on the customer requirements.

Alarm type	Description
Tank Leak	The system has detected a leak from the tank.
Tank Level High	The level of the tank is greater than specific values.
Tank Level High High	
Tank Level Low	The level of the tank is lower than specific values.
Tank Level Low Low	
Tank Level Over SFL	The level of the tank is greater than the SFL: Safe Fill Level. Mandatory alarm to avoid over spill.
Tank Level Reorder	The level of the tank indicates that you should reorder product
Tank Level Above Max Ops	The level of the tank is greater than the max ops set
Tank Level Below Min Ops	The level of the tank is lower than the min ops set

63.3. System Health

All of these alarms can be configured in the tank configuration page (Storage/Tank details/Edit Tank), with the exception of the 'AdaptMAC offline' alarm, which is defined per AdaptMAC record in AdaptIQ.

AdaptMAC offline	
GTS stopped	Alarm if GTS not run after X hours

RAS stopped	Alarm if RAS not run after X hours
Tank Out of Comms - Alert	A **Comms Alarm** is raised when no communication could be established between AdaptIQ and a Tank gauge, as a result no reading could be recorded for the tank level.

63.4. Transactions

Note about overfill alarm: it is different from the **Storage Alarm** (SFL Only) in two different ways:

- The Overfill Alarm is always linked to a movement transaction while the Storage Alarm is a result of reading the Tank Level.
- The Overfill Alarm could be for a tank or equipment while the Storage Alarm (SFL) is only for a tank.

Alarm type	Description
Equipment Overfill	Dispense to an equipment made over its SFL. (Can never be 'Active', they are raised with the state 'Cleared')
Key Bypass *	AdaptMAC is set on key bypass through a physical key. All outputs are switched ON, completely bypassing the system control.
Meter Inactivity Alert	This is set per Meter record in IQ, under each MAC
Tank Overfill	Delivery that raises the level of a tank above its SFL

*Note: this alarm cannot be acknowledged through the User Interface. If the AdaptMAC is functional and is set on Key Bypass, it will send an alarm to AdaptIQ and when the AdaptMAC is taken out of Key Bypass, it will send an alarm acknowledgment to AdaptIQ

64. API Offerings

Revision History

Rev.	Description

There are two options when requiring an API to post data; **GraphQL** and **REST**.

GraphQL is an alternative to common RESTful web APIs that allows the consumer to customise their request to receive only the data required. It implements an object based query language to easily describe the relational structure of the required data and provides one endpoint for all data requests. This approach makes queries more efficient by eliminating the need for multiple requests and preventing over or under fetching data.

All data pertaining to these APIs can be provided to customers upon request.

Data that can be altered via APIs:

- V1 APIs
    - Cost Centres API — Actions: GET, LIST
    - Delivery API — See Delivery API v2 - Retrieving Delivery transactions.
    - Departments API — Actions: GET
    - Dispenses API — See Dispenses API v2 - Retrieving Dispensing transactions.
    - Equipment Categories API — Actions: GET
    - Equipment Groups API — Actions: GET
    - Equipment Items API — See Equipment Items API v2
    - Field Users API
    - MCUs API
    - Meters API
    - Products API — See Products API v2
    - Tank Data Feed API — Alternate version Tank Data Feed API v2
    - Tanks API — See Tanks API v2
    - Transfers API
    - Equipment Item Update API
    - Field Users Access Card API
    - Field User Resources API
    - Field User Resources Access Card API
    - Movement Documents API
- V2 APIs
    - Delivery API v2 - Retrieving Delivery transactions. — Actions: LIST
    - Dispenses API v2 - Retrieving Dispensing transactions. — Actions: LIST
    - Equipment Items API v2 — Actions: GET
    - Products API v2 — Actions: GET, LIST
    - Tanks API v2 — Actions: GET, LIST
    - Tank Data Feed API v2 — Actions: CREATE
    - Site Movements API (v2) — Actions: CREATE
    - Delivery Docket API (V2)

65. Glossary

Revision History

Rev.	Description
	AdaptMAC (Adapt Manage Authenticate Control) Robust touch-screen computer, installed on site at delivery/dispense points. It allows the monitoring and control of the supply and dispense of products.
	Delivery Alarms Refer to deliveries on site that exceed the capacity of the tank itself. An overfill alarm is raised when a delivery raises the level in a tank above its safe fill level. This will appear in the drop down menu as shown. It states the date, time and amount that a tank was overfilled.
	Alert A system message that requires further user action.
	Archive Transfer of obsolete data out of a system to reduce the size and improve performance.
	Calculated Storage Value The 'theoretical' values calculated from the total deliveries, transfers and dispenses recorded in a given period.
	DAD DAD, or Data Acquisition Device, is a general term use to describe hardware devices which help to collect tank data from sensors, usually by converting various protocols or communication methods (such as MODBUS or 4-20mA) to something readable by normal network devices and applications, such as AdaptIQ and AdaptMACs.

Dashboard

The Dashboard is the home page of the AdaptFMS interface and the default landing page after logging in to AdaptIQ.

Delivery and Dispense Graph

This graph displays the amount of fuel that has been delivered to and dispensed across site over the last 14 days. Each column represents the fuel transactions site-wide on that day.

Dispensing

Transfer of product from a storage vessel, fuel farm or tanks to plant or equipment.

Dispensing point

A location from which the dispensing of products is controlled. Dispensing points may be fixed (for example, ground tanks) or mobile (for example, service trucks).

Engine hours

The cumulative total hours of engine operation for plant or equipment. Can be measured as two totals – idle hours and working hours.

Equipment

A collective term for mobile machinery used for operational purposes that, in the context of this document, consumes products (for example, trucks, bulldozers

Fill point

A reservoir on plant or equipment that contains product (for example, a fuel tank, oil cylinder, transmission, drive line or hydraulic reservoir).

FIS

Fill-point identification switch A switch on an IDT that transmits the identity of a particular fill-point on plant or equipment.

FMS

Fuel management system.

Gauged Deliveries

Gauged Deliveries is composed of 2 types of transactions: automatically generated ingress transactions ("Gauged Deliveries") and automatically generated egress transactions ("Gauged Spillage").

The feature works by calculating the difference between known ingress and egress transactions (metered or user-entered or otherwise).

It then compares this "theoretical" calculated tank volume with the actual tank volume data: i.e. the real-world sampled tank volume data. Where there is a discrepancy between this calculated volume and the real-world sample points (within a tolerance percentage), AdaptIQ will generate one or more "Gauged Spillage" type Dispensing Transactions or a "Gauged" type Delivery Transaction.

IDT

Identity tag See **AdaptFMS IDT**.

Log

A journal of messages or events.

MCU

Master control unit. A hardware device on a store or dispensing point that monitors and controls the supply and dispensing of products, and exchanges data with the AdaptFMS software. It is a direct replacement for a SMART CPU.

MCU App

AdaptFMS Software that runs on the MCU.

Meter

A device on a store that measures the volume of product supplied or dispensed.

Mileage

The cumulative total distance travelled (self-propelled) by a piece of equipment or a vehicle.

Monitored Storage Value

The 'real world' values obtained directly from the sensors monitoring the actual tank levels.

NMI

National Measurement Institute.

Notification

A system message that requires no further user action, that is, for information only (c.f. 'alert').

OEM

Original Equipment Manual.

Plant

A collective term for fixed machinery used for operational purposes that, in the context of this document, consumes product (generators, etc).

Problem

A circumstance in which the system operates as specified, but that is still potentially unacceptable to the business (c.f. 'error').

Product

A collective term for all materials dispensed by the fuel management system – fuels, lubricants, coolants, etc.

Reagent

Product dispensed for use in chemical processes (typically explosives).

RFID

Identity tag. A hardware device on that transmits a unique identifier for the equipment.

RTD
Resistance Temperature Detector. Sensors used to measure temperature by correlating the resistance of the RTD element with temperature.

RTM

Remote tank monitoring.

SCU

Slave control unit. A hardware device on a store or dispensing point that monitors and controls the supply and dispensing of products, and exchanges data with a master control unit (MCU).

Sensor

A hardware device on a storage vessel that measures the amount of product in that vessel.

Service Counter

A collective term for any measure of usage of plant or equipment, for example, engine hours or mileage. Service counters are typically read from field instrumentation such as odometers, hour meters, and IDT's.

SFL

Safe fill level

SOE

Standard operating environment A set of standard software and hardware including operating system to allow for fast deployment and recovery.

Spillage

Product dispensed, but not into plant or equipment or as a reagent

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Storage Level Graph

This graph displays quantities of volume of <DIESEL> stored site-wide over the last 14 days.

Storage vessel

A single reservoir of product awaiting to be dispensed (for example, a bullet tank)

Store

A collective term for multiple storage vessels at a single location (for example, tank farms, service trucks, in-pit refuellers)

Strapping Table

The strapping table is the data that is used by AdaptIQ to calculate Volume values from values obtained from sensors (typically in Milliamps) by a process of linearisation for certain Data Acquisition Devices such as the ADAM6017.
Note: if the DAD is an E+H RSG40 or an E+H TankVision or a GSI CIM, then the strapping table is not editable from the AdaptIQ and is actually stored in the device itself.

Supply

Transfer of product from a supplier to a store.

Tag Proximity reader

Identity tag reader. A hardware device on a dispensing point that receives the transmission of a unique identifier from the RFID of plant or equipment.

Transaction

A collective term for all types of product transfer (supply, dispensing, or any other)

Vehicle

A car or light-to-medium weight truck used for general purposes or fitted out to support plant or equipment.

Virtual Tank

A Virtual Tank is not a physical tank. It is used to represent a group of tanks for reporting and data purposes in AdaptIQ.

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