

Fuel Distribution for ACCPAC is a comprehensive application developed to meet the requirements of fuel distributors. The industry presents many unique and complex accounting issues, Fuel Distribution extends ACCPAC financial package to address these issues and deliver the efficiencies of a fully integrated system.

The core Fuel Distribution for ACCPAC module provides many features not available from ERP vendors, components of the core module include:

- Date-based pricing engine
- Debtors module extensions
- Inventory module extensions
- Vehicle Management
- Sales Analysis including Report Builder program

Optional modules extend the functionality of the Fuel Distribution for ACCPAC system further for operations that require such feature sets. Some optional modules require additional ACCPAC modules to integrate with. Optional modules include:

- Demand and Transportation Planning
- Retail Despatching
- Site Management including Tank Monitoring and Usage Planning
- Field Asset Management
- Oil Company Reconciliations

Furthermore, Fuel Distribution for ACCPAC has developed a variety of remote systems that communicates directly with the powerful Accounting objects via the ACCPAC Advantage Series rich infrastructure components

- On Board Systems
- Web interfaces for customers and third-party access.

Benefits

Industry Standard Technology & Extensibility

Developed using the ACCPAC SDK allows Fuel Distribution to utilise sophisticated and modern industry technologies core to the ACCPAC environment

- Microsoft VBA macro language
- Web Services (SOAP) exposure of core functionality for PDA or Web integration
- Crystal Reports
- Microsoft Office and SmartTags

Choice & Flexibility

ACCPAC Advantage Series non-proprietary design allows companies to maximise their technology investment and choose future vendor relationships

- Supported databases include IBM DB2, Oracle and SQL Server
- Supported desktops include Windows and Linux

Efficiency

- Greater user satisfaction due to applications that mirror true requirements. The Fuel Distribution pricing model watches the true situation, as opposed to using a "generic" pricing model which means creating pricing tables of tens of thousands of records for each different price.
- The application software integration/functionality, and integration of the application software with Microsoft products, should result in major process improvements. These will allow staff to be allocated new roles and/or result in cost savings.
- The ability to enter data once at the source and use that data multiple times subsequently reduced administration time and cost – and therefore shorter payback period

Core Integration to Strong Accounting System

Fuel Distribution is tightly integrated to the ACCPAC accounting software. Sub classed extensions to ACCPAC core modules provide a robust integrated solutions.

Reporting

- Flexible and comprehensive reporting - improve relevance, reliability and timeliness of management information
- Reports developed in Crystal Reports allows easy customisation of packaged reports with the most widely accepted report writer in-house

Fuel Distribution Core Module: Date Based Pricing

The date based pricing engine is sophisticated and powerful, complex pricing configurations can be easily created to correctly replicate real world requirements.

Fuel pricing is calculated in real time by compiling a unlimited number of contributing factors each resolved for the required date. If any of the required factors are missing, not available for the requested date or outside the allowed parameters, the pricing engine will return an error condition to the transaction preventing further processing.

- **Real-time compiled pricing and discounting engine**

Pricing components can be applied by IC Item, AR account set, FD region, FD pricing group, IC location and AR customer – the engine provides a real time price compilation approach that provides complete auditing recording.

- **Historical pricing ability**

As the pricing engine collects each pricing component by date, historical generation and look-up facilities are available.

- **Pricing Constants**

Due to the powerful isolation available in the pricing engine, there may be some pricing components used in multiple places. Global and Item pricing constants provide substantial efficiency.

- **Account set isolation and configuration parameters**

Pricing can be completely isolated using ACCPAC AR Account Sets, this allows for a numerous customer options to be managed appropriately, most significantly charter cartage and cartage recharging can be configured at account set or customer level, additionally complex credit return transactions with fuel company customers can be configured and managed by account set.

Pricing Matrix

Effective Date	Value	Change	Res
16/12/2002	+0.9030	-0.0120	Di
17/11/2002	+0.9150	+0.0305	Di
03/11/2002	+0.8845	+0.0190	Di
30/10/2002	+0.8655	-0.0070	Di
20/06/2002	+0.8725	+0.0185	
16/05/2002	+0.8540		

Real-time Compiled Price Lookup

Price Factor	Description	Price	Last Updated
Cost Price		+0.9030	16/12/2002
Rebate		-0.0085	01/01/2002
Smoothing		+0.0015	01/06/2003
Rack Price		0.8960	
Regional Tax	Western Sector	+0.0033	01/01/2002
Regional Margin	Western Sector	+0.0356	01/01/2002
Regional Price		0.9349	
Group Margin	Category B	+0.0820	01/01/2002
Group Price		1.0169	

All pricing exclusive of GST

Fuel Distribution Core Module: AR Extensions

Configuration of ACCPAC AR is extended in several areas for Fuel Industry requirements, Fuel Distribution adds several unique configuration settings such as Customer Sectors, Delivery Regions and Pricing Groups to accommodate the advanced pricing and provide advanced operational analyses.

Specially developed Customer User Interface allow for a single point where all ACCPAC and Fuel Distribution details can be accessed and maintained using the common ACCPAC look and feel. This customer interface is configurable using ACCPAC user security settings.

Customer Configuration

Customer: 10001 Customer Name: Cullen Trucking Limited

Account Type: Balance Forward

Pricing Group: B Category B

Region: 01003 Western Sector

Tax Group: LBT1WE LBT - Div 1 -Wellington

Group	Description	Status
BULK	Bulk Products	Allow

Date	Discount Value
------	----------------

Save Delete Close

- **National Account Handling**
Complete handling of National Account and third-party configuration, National Account receipting and complex pricing allowing for pricing group and discounting to be set at national account level, but regional margin derived from customer account
- **Complex Invoice Statements**
Ability to produce complex invoice / statements. Granular ability to customise statement suppression conditions by customer.
- **Pricing Group Thresholds**
Ability to specify annual minimum and maximum sales quantities by pricing groups, this allows customer alignment reporting identifying customers that are consuming volumes requiring greater or lesser margins.

Fuel Distribution Core Module: Operational Batches

The design of Fuel Distribution batches is to allow multiple transactions types within a batch rather than a batch of single transactions. In this way a Fuel Distribution batch mirrors the day's operational transactions.

- Transaction type available to batches include:
- Inventory Delivery transactions and credits
- Cartage Delivery transactions and credits
- Terminal Loading transactions and credits
- Fuelcard Sales transactions and credits
- Point of Sale transactions and credits
- Inventory transfers
- Own use shipments
- Tank and Meter Readings

A strong design feature of the Fuel Distribution batch is to allow the collection and recording of transactions and to pre-process or validate the transactions prior to entry into the accounting system.

This pre-processing stage allows for pricing calculations and many operational checks to be performed on the data isolating errors of many different types reducing the downstream correction requirements. Batches also have warning conditions that can be customised to alert administration staff to key issues.

Batch Transaction List

Transaction Type	Reference	Account	Account Name	Date	Errors
Load	J457688420	FUELCO01	Oil Company - Bulk Acc...	16/06/2003 17:26	
Transfer	TF57893	52	Truck 52	16/06/2003 17:26	2
Delivery Invoice	46546	10001	Cullen Trucking Limited	16/06/2003 17:30	
Delivery Invoice	46547	10003	Lomu Contractors Limited	16/06/2003 17:46	
Delivery Invoice	6548	10003	Lomu Contractors Limited	16/06/2003 17:46	

Transactions:	5
Total Quantity:	4,071.00
Total Value:	16,103.57

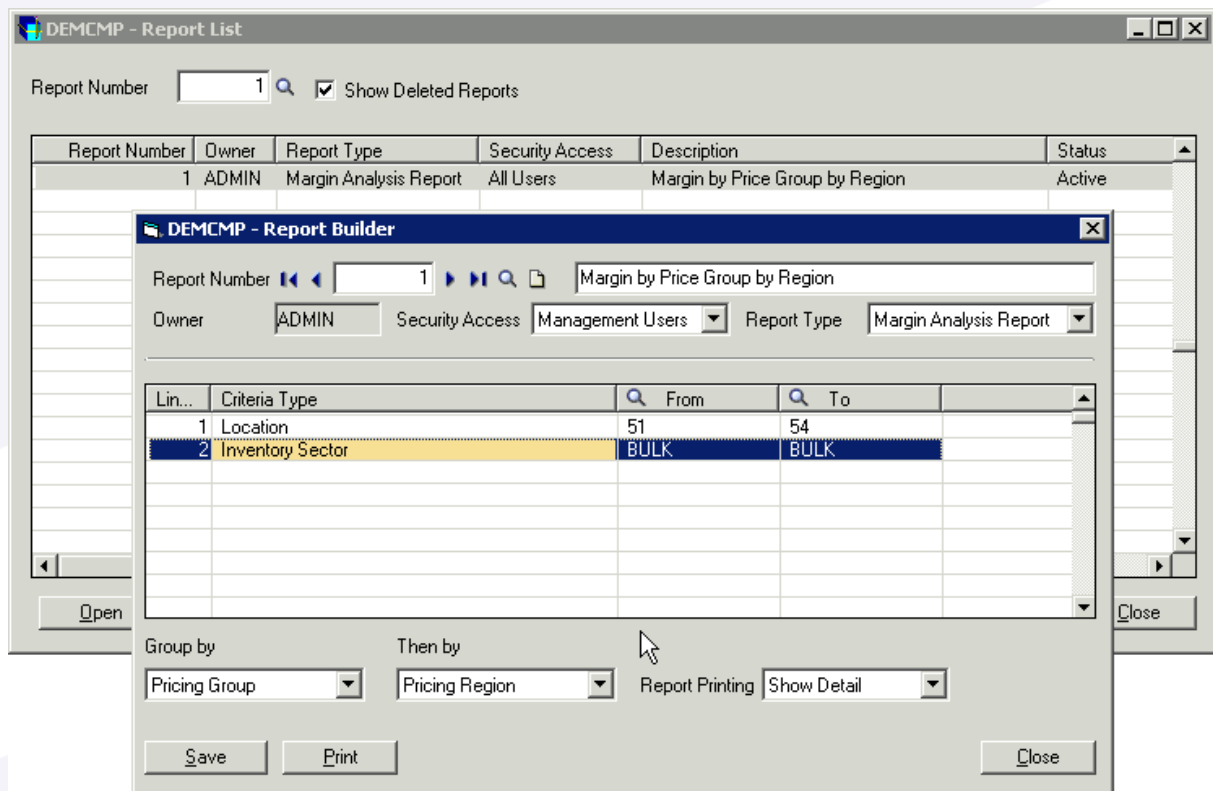
Fuel Distribution Core Module: Reporting

The design of Fuel Distribution is with advanced analysis of transactional data; each transaction records many pertinent fields for later use by reporting.

Fuel Distribution also ships with "Report Builder", an interface capable of designing multiple reports with a vast variety of selection and grouping criteria. The benefit of report builder apart from its power is the ability to save reports and publish them for all users to later utilise; when the reports are rerun they are automatically refreshed with the latest historical data.

All standard reports and report builder reports are developed in Crystal, this allows further simple and cost effective customisations to suit any companies particular needs.

Report Builder



Fuel Distribution Core Module: Other Features

There are many sophisticated features built into Fuel Distribution for ACCPAC not covered by the scope of this document, the core product has built-in functions to be customised to suit any distributor business.

Some of the additional key features of the product are listed in this section.

- **Complex Fuelcard Processing Logic**
Processing of Fuelcard transactions handles a number of complex issues, such as non-stock processing, resolving inventory location mapping (ie Truckstop / Fuel Island) and creating inventory based transactions. Complex pricing calculations resolves lowest of zone price minus customer discounting versus pump price.
- **Vehicle Route Management**
Ability to create and maintain delivery routes, these routes can contain customers ordered as per delivery sequence. The use of the ACCPAC infrastructure allows this route data to be formatted in any manner that an on-board device may require.
- **Vehicle Performance Reporting**
Ability to create and maintain delivery routes, these routes can contain customers ordered as per delivery sequence. The use of the ACCPAC infrastructure allows this route data to be formatted in any manner that an on-board device may require.
- **Off-road Tax Credit Reporting**
Distance between highway and delivery point can be recorded for each customer, a periodic report can be generated for Vehicle Road-user Tax Credit requirements.
- **Local Body Tax Collection and Reporting**
Fuel Distribution utilises the ACCPAC advanced tax modules capabilities to calculate and report multiple Government fuel taxation and tariffs requirements, taxes can be calculated and handled on a Litre or Gallon basis.
- **Granular Security**
Fuel Distribution utilises the ACCPAC role-based security model to control access to system functions, however, more granular security is available within Fuel Distribution to restrict access for users to specific AR account sets, Inventory Locations and pricing overrides.
- **Email Notifications**
Fuel Distribution allows for configuration with SMTP server to issue AR and Inventory notifications to specified email groups or individuals. Conditions include AR credit limit exceptions, flagged fuelcard transactions, negative inventory conditions to name a few.
- **Integrated ACCPAC application allows for extension**
Fuel Distribution is developed using the ACCPAC SDK (Software Development Kit), this use of the significant ACCPAC infrastructure allows for unlimited customisation and extension to the core product. Data is available for use by any other integrated system able to utilise COM components.

Demand and Transportation Planning

This module provides the environment for fuel distributors to plan their fleet deliveries.

Features

- Deliveries able to be recorded from multiple sources, including:
 - Standing schedules
 - Customer orders
 - Demand planning
- Demand planning using predictive calculations based on customer tank meter reads, which signals when a delivery will be required for each customer site.
- Integrated with the Retail Despatching module, for receipt of retail fuel orders.
- Suggested despatch schedules able to be manipulated by the operator to derive the final despatch schedule for each shift, as well as load requirements.
- Standard delivery schedule and load sheet forms.
- Delivery schedules take into account customer tank/product rules.
- Transmission of load and delivery data to each vehicle's on-board system.

Optional Module: Site Management

The Site Management module provides the functionality to collect tank dips and pump readings to ascertain that no tank seepage is occurring. This area is sometimes referred to as Customer Inventory Control System (CICS).

As tank seepage presents a major environmental and commercial hazard, Fuel Distribution Site Management provides the infrastructure to enable auditable and accurate recording and reporting of site variances.

Site Management Interface and Calculations

The screenshot displays the 'Fuel Distribution for ACCPAC - BackOffice' application window. The left sidebar shows a tree view of the system structure, including 'FD Demo Company', 'Transaction Batches', 'Asset Types', 'Customers', 'Customer Statements', 'Inventory', 'Pricing', 'Reconciliations', 'Reporting', 'Site Management', 'Depot - Div 1', 'Depot - Div 2', 'Cullen Trucking Limited', '1 - Diesel', '2 - Diesel', 'Lomu Contractors Limited', 'Vehicle Management', and 'F/D Setup'. The main window is titled 'Tank Details' and shows the following information:

- Product: 100001
- Capacity: 45,000
- Tank Number: 1 Diesel Tank 1
- Tolerance %: 0.5

Below this information are tabs for 'Transactions', 'Pumps', and 'Comments'. The 'Transactions' tab is active, showing a table of transactions with columns for Date, Action, and Reference. The table contains the following data:

Date	Action	Reference
11/03/2003	Load	B0031-T01-015210
11/03/2003	Dip	B0031-T01-015210
28/02/2003	Load	B0019-T01-013941
16/02/2003	Load	B0012-T02-013459
16/02/2003	Dip	B0012-T02-013459
01/02/2003	Load	B0004-T01-012356
01/02/2003	Dip	B0004-T01-012356

Below the table, there are several summary statistics:

Opening Dip:	8,500	8,500
+ Delivered:	32,800	32,800
- Closing Dip:	15,850	15,850
Tank Throughput:	25,450	25,450
- Pump Output:	25,990	25,990
Expected Dip:	15,310	15,310
Closing Dip:	15,850	15,850
Dip Variance:	540	540
Dip Variance %:	2.1%	2.1%
Tolerance:	0.5%	0.5%

Features

- Ability to configure for Customer Sites and Inventory Locations
- Configuration of multiple tanks and tank types at each site
- Configuration of tolerance thresholds and reporting of tolerance exceptions
- Site variance report – highlights where variances exceed permitted thresholds
- Automatic collection of transaction site transactions from batch posting process
- Ability to record Reading on each individual pump
- Ability to handle abnormal pump meter functions including Meter Resets, Ring-on adjustment and Variance adjustment

Optional Module: Fuel Company Reconciliations

The Fuel Company Reconciliation module provides the functionality to record and reconcile the multi-component transactions between Distribution Companies and Oil Companies.

Even in a small to mid-range distributors, the transactional volumes requiring reconciliation are substantial task. Users can quickly identify incorrect Oil Company pricing charges, incorrect quantity charges and missing transactions. The module

The reconciliation process allows for multiple resolutions per reconciliation transaction, in the uncommon event that the correction transaction does not balance the reconciliation transaction. Comments and dates help document the resolution process and is an invaluable asset in removing the dependency on key staff to recall the historical events.

Document	Date	Type	Item	Volume	Unit Cost	Value	Pay
Lube restocking Credit	01/06/2003	MEMO		0.00	0.0000	0.00	<input type="checkbox"/>
	01/06/2003	Total lubs returned				-42,105.00	<input type="checkbox"/>
B001-T01-0001	15/06/2003	DELIVERY	100001	-5200.00	0.9030	-4,695.60	<input checked="" type="checkbox"/>
B002-T01-00064	15/06/2003	LOAD	100001	32000.00	0.9030	28,896.00	<input checked="" type="checkbox"/>
	16/06/2003	Incorrect Quantity x33000				29,799.00	<input checked="" type="checkbox"/>
						0.00	<input type="checkbox"/>

Handles various transaction types

- Loading dockets transactions (invoices to AP Vendor Account)
- Delivery invoices (credits to AP Vendor Account where delivery to Fuel Company direct customer)
- Delivery freight charges (invoice to AR Cartage account)
- Transactions entered directly in ACCPAC ledgers against Vendor and Customer accounts

Other Features

- Allows for entry and payment of the amount submitted by the Fuel Company against the

distributor's transaction, with the difference being retained for future resolution

- Notes about the cause of the error can be captured and viewed
- Un-reconciled Item report – details all transactions that are unreconciled at a given date
- Transaction Variances report – lists all variances for a given date range
- Ability to create Memo and Write off transactions and record interaction with Oil Company on these accounts.

On Board Systems

An on board system has been developed and is currently awaiting production testing, this module is planned for release by late 2003.

The On Board module uses a touch-screen interface to provide rich functions to the driver, including recording of delivery data both in an unscheduled and scheduled modes, meter reads. The system interfaces to pump meters and an onboard printer.

Data can be transmitted between the vehicle and head office, either real-time via wireless technologies or in batch mode using wireless, infrared or modem communications.

The onboard system also has an interface to handle compartment loading, axle weight analysis, pre-drop planning calculations and site procedures including images.

Features

- Transmission of planned load and delivery data to vehicles,
- Integrated with the Demand and Transportation Planning module.
- Facility to receive multiple transaction datasets, including actual loads and deliveries, customer meter reads, product transfers, etc.
- Multiple file formats supported, including XML.
- Audit log of communication event and transactions.

Technical

Databases Supported:
SQL Server, DB2, Oracle, Pervasive

Requires ACCPAC Advantage Series version 5.1 or higher

Deployable using either using standard LAN installation or utilising Citrix Metaframe

Deployable either in-house, on a "managed operations" basis or fully hosted

ACCPAC SDK

Because Fuel Distribution 5.0 has been developed in the ACCPAC Software Development it (SDK), the following standard ACCPAC functions are available:

- Same "look and feel" as ACCPAC
- Fuel Distribution is available on all of the databases and operating systems supported by ACCPAC System Manager
- ACCPAC's role-based security system can be used to limit user group access to certain product modules or security levels.
- VBA macro's can be used to access the Fuel Distribution views
- Users use ACCPAC LanPak's in the same way that they do in core ACCPAC modules

System Requirements

Fuel Distribution for ACCPAC 5.1 requires the following modules:

GL, AR, AP, IC, OE, PO

For More Information

Visit our web site at www.pacifictechsol.com for additional information about Fuel Distribution for ACCPAC, and our contact information.

All product names referenced herein are trademarks of their respective companies.

© 2004 Pacific Technology Solutions Limited. All Rights Reserved.

