Automate Processes from Terminal to End Consumer and Manage Retail Fuels Business
## Table of Contents

3  Quick Facts

4  Automate Downstream Processes to Fuel Competitive Advantage

5  SAP Software Supporting Secondary Distribution and Fuels Retailing

6  Order Management and Logistics Automation

7  Demand Forecasting and Replenishment

8  Truck Scheduling and Dispatch

10 Retail Fuel Operations

13 Deploying SAP for Oil & Gas Solutions in the Cloud

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**30%**

Lower total cost of ownership for partner managed cloud over on-premise deployment

Source: SAP Performance Benchmarking, 2014
Quick Facts

Summary
For oil and gas downstream companies today, there are simply too many challenges inherent in the marketplace to remain competitive without streamlining the inefficiencies typical in the industry. SAP for Oil & Gas solutions help you do that, and more. These solutions, the industry standard, help you achieve operational excellence with overall data accuracy, transparency, and cost control. SAP® solutions are designed for fast implementation and scalability. And, you can opt for a fully managed solution as a service, delivered by a trusted SAP partner. This way, you can consume the software as an operating expense with a lower total cost of ownership than an on-premise deployment.

Objectives
• Develop a long-term strategy for best-practice operations
• Increase efficiency to control costs and remain competitive
• Automate processes to reduce manual effort

Solution
• A common platform for all secondary distribution and fuels retailing processes
• An automated, integrated order-to-cash process for bulk and liquid products and support of the liquefied petroleum gas (LPG) business
• Scheduling, planning, and execution in one system – radically reducing the number of interfaces to “satellite” logistics systems
• Accurate, real-time transparency of all payment and inventory processes

Benefits
• High degree of process automation
• Improved service for enhanced customer satisfaction and loyalty
• Reduced transportation costs, labor costs, and inventory levels
• Higher profitability through better decision making and improved utilization of assets

Learn more
To learn more, please contact your SAP representative, visit us on the Web, or see detailed information here.

51%
Of the savings of partner managed cloud realized in year one

Source: SAP Performance Benchmarking, 2014
Automate Downstream Processes to Fuel Competitive Advantage

The daily challenges faced by oil and gas downstream companies are greater than ever before. Cash flow and margin pressure. Instability, volatility, and uncertainty in the markets. Heightened regulation. Competition for scarce resources. In this environment, companies need to increase efficiency to control costs and remain competitive. They need to automate processes to reduce manual effort. They need to build and retain customer loyalty, which requires flexibility and delivery of excellent customer service.

SAP offers you future-proof IT solutions with a long-term strategy for best-practice operations. With SAP for Oil & Gas solutions, you can tackle head-on the inefficiencies typical in the industry today: high cost of operations, excess inventory levels, underutilization of resources, and internal silos requiring manual consolidation of key information. You can automate sales and logistics processes for refined products and liquefied petroleum gas. You can forecast demand accurately; boost scheduling and dispatch efficiency; better manage stock levels; and deliver on-time, complete orders consistently. In short, SAP® solutions enable you to achieve operational excellence.

These industry-specific solutions are designed for easy implementation and scalability as your company grows. The innovative power of SAP and the partner community safeguards your IT investment. In fact, more than 70% of the world’s oil and gas companies use SAP software, and the industry has successfully relied on SAP solutions for many years. The combination of standard solutions tailored to your needs through the expertise of SAP partners allows you to optimize your entire process chain – from order management to disposition, data reconciliation, invoicing, and reporting.

Further, you can take advantage of SAP software as a packaged solution from an SAP partner, offered on a subscription basis, hosted by the partner in a private cloud. You can opt for a ready-to-use, fully managed solution as a service, consumed as an operating expense with a lower total cost of ownership than a typical on-premise deployment.

90% Improvement in implementation time for partner managed cloud compared to on-premise solutions

Source: SAP Performance Benchmarking, 2014
SAP Software Supporting Secondary Distribution and Fuels Retailing

For oil and gas companies involved in secondary distribution and fuels retailing, SAP offers comprehensive support for end-to-end processes in secondary distribution and fuels retailing:

• **Order management and logistics automation** – Automate end-to-end processes for sourcing and supplying products from terminals to the end consumer, and manage supply of service stations.

• **Demand forecasting and replenishment** – Predict future orders and provide your customers with repeat deliveries at the right time, every time, at fixed intervals or based on consumption forecasts. Manage autoreplenishment of tanks and use best-buy scenarios.

• **Truck scheduling and dispatch** – Plan routes to dispatch for deliveries to consumers and service stations, improving dispatching and transport planning and optimizing available resources. Monitor delivery gains and losses by haulers or your own fleet.

• **Retail fuel operations** – Manage the retail fuels business at service stations.

• **Process automation and integration** – Achieve simplification through integrated and automated order-to-cash processes to reduce costs by eliminating manual steps.

See [Figure 1](#) for an at-a-glance look at the processes the solutions support.

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**Figure 1: Support for a Comprehensive Range of Key Processes**

- **End to end**
  - Secondary distribution and fuels retailing

- **Capabilities**
  - Order management and logistics automation
  - Demand forecasting and replenishment
  - Truck scheduling and dispatch
  - Retail fuel operations

- **Solutions**
  - Secondary distribution management for oil and gas
  - Retail fuel network operations for oil and gas
Order Management and Logistics Automation

A telesales cockpit helps improve order management by providing the central base for your work in sales. It is a clear and efficient way to record orders, inquiries, quotes, and contracts. The salesperson has an overview of all key customer data at a glance, while further detailed information can be displayed at any time. Functions of the telesales cockpit include those for collective orders, redelivery contracts, and outbound activities. Evaluations from the sales and procurement divisions and any branch office provide additional support for the salespeople. Most of the activities are conducted on a single screen.

**Prescheduling**
Prescheduling is conducted directly from the telesales application, providing the customer with a planned delivery date or enabling the dispatcher and customer to agree immediately on the best possible delivery time as the order is entered. Delivery time zones are shown to help dispatchers and customers visualize the current status in preliminary dispatching.

The integrated dispatching and route planning software described below can also be used as an option.

**Data Reconciliation and Confirmation of Delivery Data**
SAP solutions support data reconciliation and confirmation, recording goods and quantities actually delivered either automatically or manually. The software is clear and easy to use, allowing quantities to be corrected immediately based on the planned quantities. Warehouse stock postings are conducted automatically. Invoices are prepared based on the reported quantities.

Data reconciliation is automated, including all processes involved in comparing delivered and planned quantities, providing transparent information on:
- Deliveries deviating from the planned quantities
- Additional products sold
- Deliveries without orders

**Interface Tool Set**
An interface tool set provides flexible, configurable options for integrating all kinds of data into the applications. This data typically comes from terminal automation systems or from forwarding agents, onboard computers, service stations, and the like. The applications support entry formats including intermediate documents (IDocs), text files, or XML. Incoming data can be integrated into the process at various stages. This highly automated standard functionality supports time-saving, cost-efficient implementation, especially when multiple, different data flows need to be integrated into the process.

SAP solutions help you:
- Create an automated, integrated order-to-cash process
- Centralize all customer information
- Recognize price fluctuations
- Automate loading and invoicing processes, including comparing product volumes and the data recorded on terminals and trucks
- Integrate transportation companies, terminals, and refineries into the process
Demand Forecasting and Replenishment

SAP software supports demand forecasting and replenishment to predict future orders. The applications allow you to provide your customers with repeat deliveries at the right time, every time, and to contact them proactively. A range of methods is available for planning. Delivery can take place at fixed intervals or based on consumption forecasts. The continuous product replenishment tool might calculate these based on the delivery history or using parameters such as the weather or comparable consumption patterns. This way, you can offer significantly improved customer service, with salespeople who contact customers proactively and inform them of upcoming needs. The software supports:

• Forecasts for end-consumer business
• Compilation of call lists for sales
• Creation of e-mail campaigns
• Automatic order creation
• A range of calculation methods

BUILT-IN ANALYTICS

For continuous product replenishment, data from many different objects in SAP software is used when drawing up forecasts, including customer master data, storage objects (tanks), delivery history, and so on.

Built-in analytics identifies customers likely to be receptive to an offer of repeat delivery. Salespeople can retrieve earlier forecasts and compare them with current forecasts, and update parameters at any time. They can set up usage factors for deliveries to make sure that they are made on time and cost-efficiently. Showing the information as a diagram illustrates seasonal consumption patterns; this way, the salesperson can select the best possible delivery method for every time of year.

The SAP for Oil & Gas solution portfolio, an industry standard, helps you achieve operational excellence with overall data accuracy, transparency, and cost control.
Truck Scheduling and Dispatch

SAP software supporting secondary distribution and fuels retailing helps manage the delivery of bulk products and reduce total cost of ownership (TCO) for your truck fleet. It provides interactive workplaces for truck dispatchers with geographical maps, using route optimization and truck compartment planning. Truck dispatchers can intuitively execute each step of the planning process with drag-and-drop, on the map, in the diagram, or in the tables. They can combine orders with existing resources, such as vehicles or service staff, for maximum efficiency. For integrated dispatch management, the applications support:

- Dispatching and route planning
- Route optimization
- Centralized and decentralized planning scenarios

Features include:

- Maps and resources displayed separately on different screens
- Excellent usability thanks to direct interaction between the map, Gantt chart, and vehicles
- Visual presentation of relevant information for maximum decision support
- Multi-location capability, including interaction between multiple dispatch personnel
- SAP master data add-ons for planning-relevant objects (vehicles, customers, suppliers, materials, and so on)
- Optional integration of external optimizer
- Optional integration of onboard/telematics equipment

See Figures 2 and 3.

Figure 2: Planning Screen for Truck Scheduling and Dispatch – Route Optimization

Figure 3: Planning Screen for Truck Scheduling and Dispatch – Resource Scheduling
INTELLIGENT CALCULATION
All transport planning clearly has the same objective: the available resources must be deployed and combined in the best possible way. This process is also significantly affected by numerous constraints, such as special or customer-specific items or individual company specifications. SAP software supporting secondary distribution and fuels retailing integrates dispatch management processes with a wide range of adjustable parameters taken into account in calculation and optimization. See Figure 4.

SUPPORT FOR ALL FORMS OF PLANNING SCENARIOS
SAP software allows you a high level of flexibility in planning. You choose the level of system support and automation you need. Whether you use manual, semiautomated, or fully automated dispatching, the SAP software supports you in achieving the best possible transportation solution.

The software enables you to:
• Reduce transport costs thanks to lower mileage, drive time, vehicle use, and overtime, as well as numerous plausibility and restriction tests
• Significantly reduce the time required for planning and dispatching
• Minimize processing time for new orders as they come in
• Improve planning and transparency for more reliable information on delivery dates and faster response

Figure 4: Gantt Chart with Calculated Operation Times
Retail Fuel Operations

SAP software supports retail fuel operations, helping manage fuel logistics and point-of-sale processes for service stations. It monitors and steers all payment and quantity flows in service station networks, and supports, for example:
- Daily dealer settlement
- Fuel inventory management
- Payment and fleet card management
- Standard point-of-sale (POS) interfaces, such as WEAT

The applications are user-friendly and scalable, offering extensive analysis and steering mechanisms, making them suitable for companies of all sizes.

MASTER DATA MANAGEMENT
The applications help you manage all relevant master business data for your service station network. It covers all the key reference values for a service station, including partners, competitors, cards accepted (credit, debit, loyalty cards), company-specific fleet cards, systems, devices, tank and material assignments, cost centers, and so forth.

FUEL INVENTORY MANAGEMENT
The fuel inventory management capability provides all functions required for tracking and valuing all transactions related to fuel that is held for sale at the station. Fuel deliveries and sales quantities provided from site-level systems are recorded. Based on fuel deliveries and sales, the software tracks book stock of all tanks. In addition, tank dip readings can be uploaded from the site or manually entered at the site and stored in the central system. Based on the book and physical stock data derived from tank dips, the applications reconcile these quantities. During the reconciliation, the software calculates differences and checks them against individually defined tolerances. Differences within limits can then be automatically reconciled by posting the stock differences.

The software supports continuous station replenishment, forecasting when an individual tank or product at a station will run low, and automatically initiating replenishment orders (see Figure 5).

PAYMENT CARD PROCESSING
Payment card processing covers uploading of card transactions from retail sites, validation checks, and settlement with the clearinghouses for reimbursement. In addition, payment card data can be provided to other processes, such as dealer settlement. Payment card settlement provides several options, such as the creation of transmission files for clearinghouses, as well as several methods of fee calculation and their distribution to site cost centers. Payment card processing covers all standard bank debit cards, credit cards, and fleet cards.
MANAGEMENT OF YOUR OWN FLEET CARDS
You can manage your own fleet cards quickly, simply, and securely. Support for fleet card management includes the settlement of card transactions, taking these transactions into account in dealer settlement, card impressions, and PIN administration, as well as functions for blocking and unblocking cards.

DEALER SETTLEMENT
The software enables simple balancing and documentation of all dealer activities with daily invoicing. It supports convenient and efficient settlement with your dealers based on sales data, with numerous plausibility checks. The settlement takes a wide range of settlement options into account, including fixed leases and percentage leases, commission, participation fees, discounts, changes in lessee, and so on.

The software enables the automated upload of fuel sales and inventory levels from local site systems – for example, POS or forecourt – as well as the manual capture of data at the site, for review at headquarters. Fuel sales are gathered as direct quantities or calculated from meter

Figure 5: Service Station Forecast – Rundown Chart
readings, which represent single pumps or, on an aggregated level, sales according to service type. Meter readings can be used to register various events such as sales, recalibration of meters, or flushes. Relevant sales quantities can be provided to other processes such as fuel inventory management and dealer settlement.

**REPORTING**
Get a real-time view of revenue, inventory, and forecasts at the service stations. A fuel network control cockpit provides you with an overview of the economic situation of your service station network at any time (see Figure 6). The data can be transmitted to mobile devices on request.

In short, the solutions harmonize and optimize business processes, supporting:
- Efficient administration of your service station network
- Oversight of fuel sales and inventory in the stations
- Central settlement and reconciliation with clearinghouses for payment cards
- Dealer settlement with fast, automated invoicing
- Close integration with secondary distribution processes
- Monitoring of the most important key figures at all times

**Figure 6: Network Operations Desk**

![Image of Network Operations Desk](image-url)
Deploying SAP for Oil & Gas Solutions in the Cloud

Rapid time to value with flexible deployment options (on premise, cloud) is becoming a mandatory requirement in the downstream area today.

Companies today are under massive pressure to deliver innovation and need cost-effective solutions fast. Partner managed cloud allows them to get the systems they need quickly, even when they have no capital to spend, limited skills, and stretched resources, and when new hardware and software investments are unlikely to be approved.

If any of this applies to you, consider this approach. In collaboration with SAP partners, you can run SAP software in a partner managed cloud. SAP partners provide a packaged solution as a service, including solutions supporting secondary distribution and fuels retailing as well as non-SAP solutions as required. The offering includes migration, implementation, and support in a private hosted cloud – a customized offering tailored to your individual needs.

You can take advantage of:
• A ready-to-use, fully managed solution as a service
• An operating expense option to consume SAP solutions
• Rapid time to value and lower TCO than a typical on-premise deployment
• Scalability and flexibility in deployment

Automate sales and logistics processes; forecast demand accurately; boost scheduling and dispatch efficiency; better manage stock levels; and deliver on-time, complete orders consistently.

For more information, please contact your SAP representative, visit us on the Web, or see detailed information here.