CASE STUDY

GASCO achieves plant information integrity with Octave SmartPlant Enterprise for Owner Operators (SPO)



Key facts:

Company: GASCO

Website: www.gasco.ae

Employees: 6,113 employees

Industry: Oil & gas

Country: France

Octave products used: SmartPlant Enterprise for Owner Operators (SPO) *(SmartPlant Enterprise for Owner Operators)*

Octave's (SPO) benefits deployed at full capacity, leading innovation technology at major operator in the UAE.

Abu Dhabi Gas Industries Ltd. (GASCO) is the operating company in Abu Dhabi responsible for processing associate and non-associate gas from onshore oil production. In April 2001, Abu Dhabi Gas Company (ATHEER) was integrated with GASCO, which led to further enhancement to GASCO's position as one of the largest gas processing companies in the world and one of the biggest industrial projects in the United Arab Emirates.

Identifying goals

Abu Dhabi Gas Industries Ltd. (GASCO) is the operating company in Abu Dhabi responsible for processing onshore natural gas and associated gas from onshore oil production fields. With a process capability of 8 billion standard cubic feet of feed gas per day (BSCFD) and producing 280,000 barrels of condensate, 6,800 tons of sulphur, and 44,000 tons of NGL per day, GASCO is currently one of the largest gas processing companies in the world.

GASCO's industrial complex, one of the biggest in the United Arab Emirates, is composed of four desert plants – Asab, Bu Hasa, Habshan, and Bab and Ruwais – and a pipeline network that processes and delivers a range of marketable products such as methane (C1) to industrial customers; ethane (C2) to Borouge; and propane (C3), butane (C4), paraffinic naphtha (C5+), granulated sulphur, and condensate, exported all over the world.

GASCO's priority is to maximize production in the most cost-effective manner, while maintaining the highest possible standards of industrial safety and protection of the environment. To ensure that its production meets growing energy demand, Gasco decided to invest in building a robust, centralized, and integrated plant engineering management system for information integrity and to ensure that all plant drawings are as-built.

Key benefits:

- Retrieving information faster and easier
- Centralized engineering data
- Better control of all plant modifications
- Better control of engineering processes workflow
- Intelligent 3D models, project data, drawings and documents
- Better navigation between 2D and 3D models
- One single platform
- Cost reduction
- Consolidated and aggregated data provide the ‘single reliable source of the truth’



Gasco adopted (SPO) as a standard to:

- Consolidate three plants into one centralized enterprise system using Octave SmartPlant Foundation (SPF) and an engineering applications database
- Create a robust (SPF) integrated with Octave engineering applications infrastructure with high availability
- Standardize (SPO) latest release and Octave engineering applications
- Unify (SPF) Schema and Octave Forte and Octave Facets
- Create new standard Major Projects/B-13 Automation Plan
- Enable the integration of (SPF), Maximo, and Open Text ECM

Overcoming challenges

Ensuring a successful migration to (SPO) required some infrastructure and organizational changes.

An engineering numbering procedure (plant breakdown structure, documents and tags) was established to ensure accuracy and consistency of data and documents. Lifecycle information requirements were listed (documentation for operations) and the contractors’ scope of work was defined.

It was important to identify one EPC responsible to deliver the SmartPlant Enterprise deliverables. This ensured leadership and appropriate coordination. It also provided early access to handover of data and documentation, with early access to compliance review and validation and verification of deliverables. To ensure everyone understood the changes, awareness and training sessions were set up, including workshops for senior management and training for designers and end users.

The implementation of the Major Projects Automation Plan was executed by establishing data and document standards, procedures, and workflows. These included data validation and security audit conducted before handover, and plant testing, as well as creating a proper backup. Follow-up with EPC contractors during the project was essential to success.



Realizing results

Currently, all plants are standardized and unified on (SPF) and related Octave engineering applications. The PBS hierarchy structure for the new system is complete and a unified SCHEMA file for (SPF) has been created. A new file database was created for Facets P&ID, Facets Instrumentation, and Forte 3D. All (SPO) hardware and software infrastructure setup was completed. The company's major projects automation plan is up and running, enabled by upgraded Facets P&ID and Facets Instrumentation engineering applications and publishing systems.

The business benefits include quicker and easier retrieving of information; engineering data is shared between applications and users; and the company has better control of all plant modifications requests through (SPF) Engineering Change Management, as well as better control of the engineering processes workflow. Intelligent 3D models, data, drawings, and documents are up to date and navigation between 2D documents and 3D models is easier and faster. Consolidated and aggregated data from multiple heterogeneous sources provide a 'single reliable source of the truth,' which increases efficiency and ultimately reduces costs.

Moving forward

Gasco is currently working on optimizing projects and operations workflows to enable smoother decision-making and increase productivity. All existing plant drawings will be converted to (SPO), providing as-built models of existing assets. In the coming months, (SPF) will be integrated with Maximo and OpenText ECM to provide a more comprehensive asset lifecycle and maintenance management. An increasing number of projects will be brought into the system, aiming to achieve fully automated and intelligent plant operations.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

©2026 Octave Intelligence plc and/or affiliates. All rights reserved.