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# AVEVA Unified Operations Center for Oil and Gas

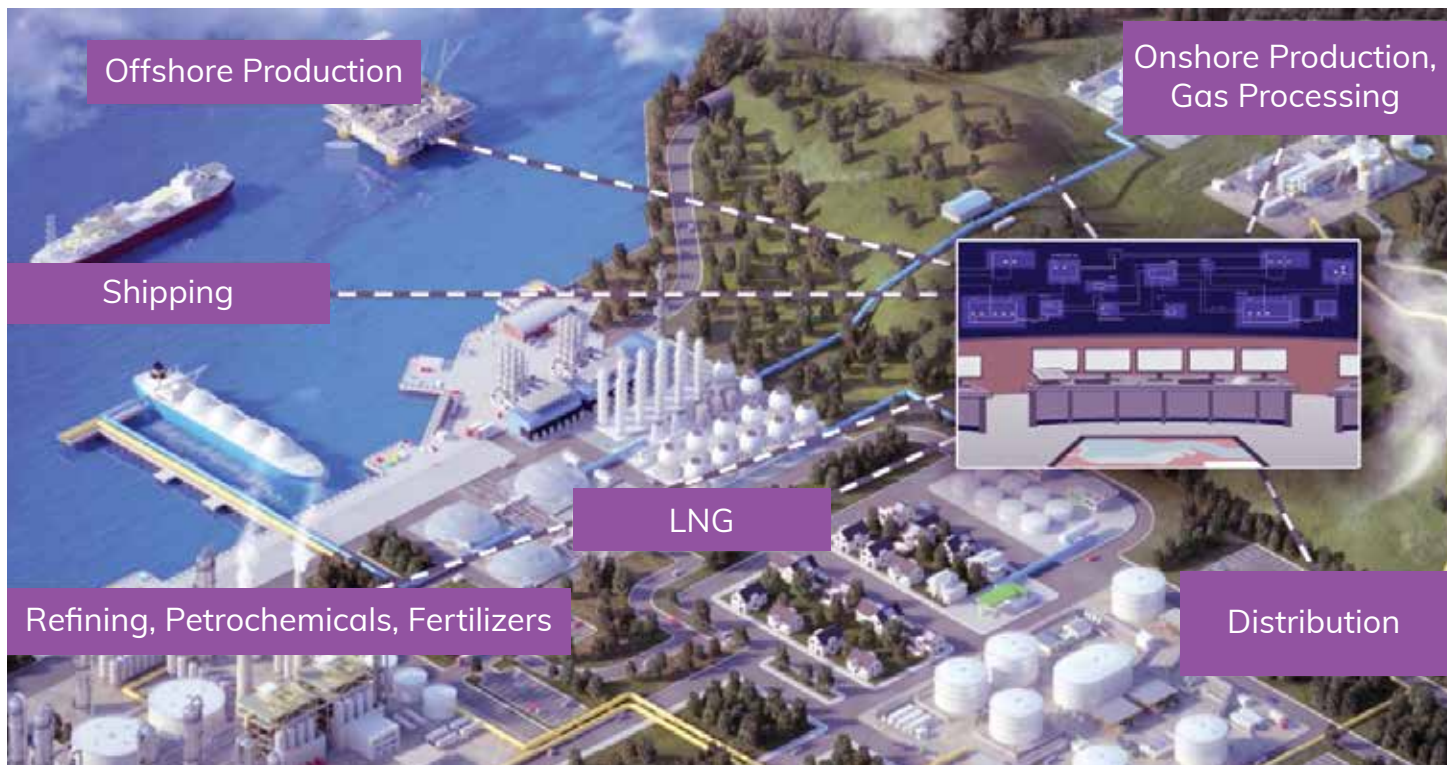
AVEVA Unified Operations Center unifies disparate systems across value chain and turns data into actionable insights, which in turn drive operational efficiency and safety performance. The closed-loop enterprise-wide visibility serves as the foundation of real-time digital oil and gas fields operations management, making field operations and staff even more safe, productive and efficient.

# Foundation for Real-Time Digital Oil and Gas Fields Operations Management

Unified Operations Center provides the measurement and reporting capability by monitoring, communicating and tracking KPIs. Operational measures such as yield, throughput, utilization, etc. can be calculated from the plant level down to the asset level. It further enables a meaningful comparison of performance across multiple sites and departments, and the ability to define and receive alerts on gap conditions, and the ability to generate operator logs and shift reports that explain events as performance deviations.

## Key Benefits:

- **Increase Bottom Line Profitability** – Operational visibility of non-financial metrics across multiple sites located globally. Monitors the measures that impact the business such as oil and gas production efficiency, asset utilization, process yield, carbon emissions and energy consumption.
- **Improved Asset Performance** – Early identification of complex linkages and inter-dependencies that shape asset performance such as equipment maintenance start and stop times and unplanned downtime.
- **Increase Operational Efficiency** – Clear, effective communication of critical production information through on-demand reporting and dashboards enables routing of field operators to the highest priority flagged assets, maximizing production efficiency.
- **Fosters Continuous Improvement Initiatives** – Greater insights that drive strategic decisions such as resource planning and better work processes across functional groups such as Safety, Maintenance, and Planning. Alignment of individual and group level goals with business objectives that provides relevant actionable information.



Our customers achieved the following value metrics by implementing Unified Operations Center:



### Increase Operational Efficiency

through improved collaboration and improved decision support by bringing the right information to the right place at the right time.



### Increase Profitability

through business integration and reduction of energy consumption, process optimization and reduced unplanned downtime.



### Increase Asset Reliability and Availability

through providing a 360° view of assets, transforming maintenance from reactive to predictive.

## A Unified Platform for your Digital Transformation

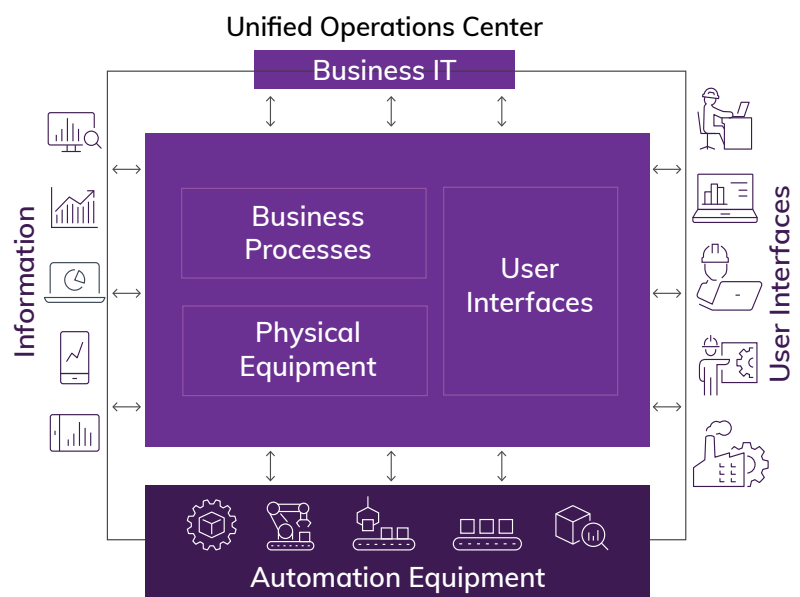
Unified Operations Center solution integrates IT and OT applications with industry-specific capabilities, greatly reducing implementation time.

Built on the scalable, proven AVEVA's System Platform, AVEVA's unified operations center offers faster time-to-value through industry-proven solution templates, reports, dashboards and operational KPIs that unify all available data from operations, process, engineering, maintenance and finance, enabling teams to improve their situational awareness of real-time operations and make better decisions.

The solution leverages existing data locked in multiple enterprise and operational systems to enable "fact-based" decisions. AVEVA's Unified operations center is based on a 'system of systems' approach. This enables seamless plug-in of apps, predictive and process analytics, CCTV video, GIS maps, ERP systems, Engineering P&ID diagrams and much more, all within the unified user interface.



Unified Operations Center turns data into actionable information contextualizing 3D Engineering design with real-time Process data





# Integrated Application Modules for Enterprise Collaboration

Unified Operations Center provides an augmented layer of intelligence ensuring the effective use of data and automation to perform at optimum capacity at lower costs. Unified Operations Center offering consists of 3 main modules:

## Management Module

- Enterprise-wide visibility - provide effective operational monitoring at corporate headquarters and subsidiary levels of the organization with target versus actual performance analysis
- Real-time decision support – understand inter-dependencies by unlocking data stored in disparate systems with insights of how operations activities impact on business (demand, capacity, cost)
- Management of Change (MOC) analysis by CAPEX and OPEX costs and project schedule

## Operations & Maintenance (O&M) Module

- Respond rapidly to unplanned downtime or crisis situations by enabling quick access to both operational and engineering data of the assets when resolving flagged operational issues.
- Eliminate human error and manual processes with automated workflows, such as automatic work orders, and easily access standardized operating procedures
- Improve collaboration using improved shift handovers and operator log books

## Asset Management Module

- Predictive Asset Maintenance – detect defects, root cause, down-time and deviations
- Optimize production, process and asset utilization using what-if analysis scenarios, and modeling of process and equipment parameters
- Improve profit margins and reduce energy consumption with analytics.



Integrated Collaboration based on Unified Operations Center



## Features

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- Enterprise Visibility (centralized command and control wall monitors)
- Executive web-based KPIs/dashboards/charts providing live real time reporting
- Automated Workflow Collaboration across Teams - Reducing response time for crisis/analyzing situation or managing complex SOP's
- Automated anomaly detection of historian data using machine learning algorithms
- Enterprise architecture proven to support large scale, multi-sites deployments
- Role-based security built on Microsoft Windows Active Directory
- Integration with SAP ERP system for access to enterprise transactional data and initiating workflows and communications
- Bi-direction integration with leading Historians (PI, PHD, IP.21) for access to "live" process data
- Mobile Operators Monitoring & Control Capability
- Ease of Engineering, Centralized Deployment, and Maintenance without system downtime

For more information on Unified Operations Center, please visit:  
[sw.aveva.com/monitor-and-control/unified-operations-center](https://sw.aveva.com/monitor-and-control/unified-operations-center)