

INFORMATION IN ONE PLACE

JD Edwards EnterpriseOne Asset Lifecycle Management
for Energy Companies



Streamline asset management.
Increase operating efficiencies.
Optimize strategic capital assets.

INFORMATION IN ONE PLACE

It takes a lot of energy to run an energy company.

It also takes a sharp focus on assets—from acquisition to retirement. It takes a focus on management of complex construction projects, careful tracking and replacement of inventory, and maintenance of expensive, indispensable plant and vehicles.

Mining, oil and gas exploration, petroleum refining and marketing, and power generation—all take energetic planning, constant monitoring of equipment, changing regulations, and return on investment. The energy industry is far flung, diverse, and subject to fluctuating pressures from inside and outside the industry. It faces multiple challenges, with a heavy investment and dependency on equipment and plant facilities, the need to increase return on investment, reduce costs, increase productivity, and grow the business.

Improve Asset Management

Changing market conditions require upstream energy companies to buy and sell oil and gas producing properties frequently. Decisions about new asset acquisition, construction projects, and the management of a widely distributed and varied inventory must be based on accurate, up-to-date information. For downstream petroleum, gas, and electric operations, the entire distribution value chain needs careful monitoring and management.

While the operations and focus of the different energy segments can be quite different, the asset-intensive nature of these businesses creates similar challenges. Round-the-clock operations place enormous strain on machines, facilities, and people to produce at increasing levels—safely, economically. Fortunately, a flexible, complete software solution can make the planning, implementation, and ongoing management of these wide-ranging operations easier.

Oracle's JD Edwards EnterpriseOne Asset Lifecycle Management allows you to meet your current and long-range challenges head-on. You can increase use of and return on assets while improving employee productivity. You can monitor and manage your parts and spares inventory from cradle to grave, from division to division, location to location—as well as enhance project return. This software solution can save you time, money—and energy.

A Complete Enterprise Solution

JD Edwards EnterpriseOne Asset Lifecycle Management is a real-time solution for the full spectrum of energy companies. It offers integrated, full-featured applications that touch and enhance every aspect of your operations, including capital asset management, strategic network optimization, condition-based maintenance, material requirements planning, enterprise-wide visibility, and project management.

With this solution, you can:

- Make the right capital investment decisions.
- Increase equipment availability.
- Optimize asset acquisitions, utilization, and disposals.
- Comprehensively manage supply chain and supplier relationships for maintenance and repair.
- Manage complex new construction projects.
- Decrease maintenance, repair, and operating inventories.
- Reduce the cost of maintaining a patchwork of disparate software systems.
- Increase workforce productivity.

With JD Edwards EnterpriseOne Asset Lifecycle Management, you effectively manage every stage of the asset lifecycle—from long-range capital planning, procurement, and construction to capitalization, operations, maintenance, and eventual disposal.

JD Edwards EnterpriseOne Asset Lifecycle Management provides full functionality and a wide range of solutions to meet your unique needs. And it does so affordably. For all energy companies, it is an economic solution that offers fast and long-term return on investment. Shifting market conditions, an uncertain economy, and changing regulatory requirements are factors you cannot control. But you can control and realize the full potential of your own capital assets with the right software solution— JD Edwards EnterpriseOne Asset Lifecycle Management.

To see how JD Edwards EnterpriseOne Asset Lifecycle Management works in real-world operating environments, consider the following scenarios.

Integrate Asset Management with Operations and Services Requirements

Scenario 1: To increase your return on investment, you need to optimize your core infrastructure needs.

Asset optimization takes planning, integrated management, and fact-based decisions. From acquisition to operations and maintenance through retirement, the way infrastructure assets are monitored, deployed, and maintained has a critical bearing on the success of your operation. Huge capital investments in equipment and infrastructure present major financial and operating challenges for the energy business.

With JD Edwards EnterpriseOne Asset Lifecycle Management, you effectively manage every stage of the asset lifecycle— from long-range capital planning, procurement, and construction to capitalization, operations, maintenance, and eventual disposal. The entire asset management process is improved by linking production and service goals to maintenance requirements—including workforce competencies, history and availability, spares, service level agreements, work-order backlog, warranties, location status, and failure analysis.

By considering operations and maintenance as part of an overall asset lifecycle management solution, you can optimize asset utilization across your organization. As a result of this integration, you can be sure that all assets are used as much as possible at a consistent performance level. At the same time, you're better able to balance costs, timelines, and revenue requirements.

JD Edwards EnterpriseOne Asset Lifecycle Management is valuable not only for tracking current assets. New assets from mergers or acquisitions can be easily incorporated into the system, which allows you a total, detailed picture of the assets in your expanded enterprise.

The benefits of implementing best asset management practices are pervasive: improved equipment reliability, reduced operating costs, increased asset utilization and production, reduced spare parts inventory, and reduced or postponed capital expenditures. With JD Edwards EnterpriseOne Asset Lifecycle Management, the optimization of assets and increased return on investment are within easy reach.

“One of the key points of Reliability Centered Maintenance (RCM) is that you have to know all of your assets and which are the really important ones to your business. To gain cost savings, you need to be able to collect fault information for analysis to streamline your maintenance program. JD Edwards EnterpriseOne Asset Management is really good at storing these sorts of categorized information, which is what we need to do for RCM.”

John Davies, Application Team Leader, Natural Gas Corporation

Scenario 2: The round-the-clock operation of your business puts a premium on the continued performance and long life of your equipment and facilities.

Whether it's mobile equipment for mining or upstream oil and gas companies or fixed plant for utilities and refining operations, the need for availability and reliability of machinery, vehicles, and production facilities affect the lifeblood of the business.

Equipment breakdowns cost you time, production, and money, none of which can be recovered. Interruptions in service to customers can spell lost revenues and lost good will. To maintain production, improve profitability, and manage customer relationships, your capital and human assets must perform seamlessly with little or no interruption, 24x7.

Maintenance of assets represents the core of any asset lifecycle management process, and it is integral to the solution. Not only does an effective maintenance program keep machines and vehicles running, it also helps you:

- Optimize capital asset use.
- Maximize capacity and resource availability.
- Improve product quality.
- Increase workforce productivity.
- Reduce MRO inventory.
- Minimize capital spending.

With JD Edwards EnterpriseOne Asset Lifecycle Management, you are able to schedule equipment servicing as needed to ensure optimal performance. The system creates preventive maintenance schedules based on thresholds you define for usage, such as hours used, miles driven, fuel used, specific dates, or time intervals. When integrated with your production scheduling tools, this predictive maintenance process can minimize disruptions in operations by scheduling maintenance around production needs.

An even more advanced maintenance routine is possible through JD Edwards EnterpriseOne Asset Lifecycle Management's condition-based monitoring features. Condition-based monitoring facilitates as-needed maintenance, triggering maintenance schedules based not on a preset schedule but on the actual condition

With integrated MRO inventory management, you save money by consolidating spare parts orders for the organization as a whole to increase purchasing power with suppliers.

“Our industry is heavily regulated for maintenance, and the previous system did not track work at the detail level we needed. We could not obtain information on maintenance costs by work order. These kinds of gaps and inefficiencies have been remedied with JD Edwards EnterpriseOne Asset Lifecycle Management.”

Don Hankey, Regulatory Compliance Administrator, Buckeye Partners, L.P.

of your equipment. In other words, you don't need to pull part of your mobile fleet into the shop just because it's been three months since the last oil change. Instead, you track the use and history of your equipment and production facilities through monitoring systems and preset alarms that are based on tolerance and safety levels.

Condition-based monitoring helps you keep assets running at optimum levels by automatically identifying changes in the performance or condition of an asset that indicate its potential for failure. Based on these changes, the system will automatically generate a maintenance action or alarm that alerts technicians to the issue. As a result, you can keep your assets running at peak levels, reducing the potential for failure.

Improving your infrastructure maintenance can optimize asset productivity, prevent unplanned service outages, and ensure safe and reliable operations. You can schedule maintenance to ensure that your infrastructure assets—vehicles, machinery, and facilities—operate effectively so that exploration, production, or service delivery is not interrupted.

With the maintenance processes of JD Edwards EnterpriseOne Asset Lifecycle Management, you can also:

- Set a baseline for each asset to capture the physical characteristics that collectively indicate its current condition and enable ongoing tracking and analysis.
- Integrate service and warranty management capabilities, which help create maintenance schedules that reflect warranty requirements.
- Analyze in detail any failure that should occur, enabling you to make a faster fix and perhaps even prevent similar failures in the future.

In sum, you keep your mobile fleet moving and working, your production facilities humming—and, most importantly, reduce costs and improve your return on investment.

Scenario 3: The widely dispersed nature of your equipment and properties demands a comprehensive inventory process.

It's likely that much of your maintenance budget is spent on acquiring, stocking, and replenishing spare parts and supply inventories. The more dispersed the inventories, the more difficult the challenge. Inventory holding costs can add up quickly for large and widely dispersed inventories—to say nothing of the transportation costs for keeping parts replacements available. Without integrated monitoring of the full supply chain and accurate materials-requirement planning, you can waste time and money by shipping and stocking inventory unnecessarily.

You face a constant and costly balancing act: keeping too much inventory on hand or not enough. To maintain an efficient balance, you need real-time, accurate access to your inventory information, whether it exists in-house or at business-partner and supplier sites. JD Edwards EnterpriseOne Asset Lifecycle Management offers a flexible, enterprise-wide view of your MRO inventory for instant, accurate access to vital information at all your inventory locations. You always know exactly which parts will need to be replaced and when, which helps you reduce excess inventory and free much-needed working capital.

You are better able to consolidate spare parts needs for the organization as a whole. Materials managers, for example, can see required replenishment data across the enterprise and can order for the entire company—rather than for individual business units or divisions—and distribute the order in the right quantities to the appropriate groups. This aggregated ordering capability helps you increase your purchasing power with suppliers and dramatically reduce inventory costs.

You are able to optimize maintenance inventories through integrated supply chain management modules that are designed to support you as you build and maintain strategic relationships with key suppliers. It becomes easier to implement lean operating principles that minimize inventory-carrying costs by automating fulfillment of spare parts and supplies.

Complete and integrated inventory management with Oracle's JD Edwards EnterpriseOne software gives you a major boost in optimizing supply chain and inventory management and reducing holding costs without adversely affecting service or production levels.

Oracle's JD Edwards EnterpriseOne Asset Lifecycle Management brings together everything—and every one—to maintain the highest productivity of your machines, facilities, and people.

Accelerate Completion of Construction Projects

Scenario 4: You're planning major construction of new facilities or extensive work on existing facilities but need to maintain high production levels.

Construction, installation, or replacement projects for energy companies are complex, time consuming, and expensive. Without adequate management of the process and integration with ongoing operations, costs can easily spiral beyond budgeted amounts. Daily operations suffer. Production slows. And, even with the best maintenance, you will need to replace and upgrade aging infrastructure. With tight margins, you need to complete construction projects—such as increasing generation capacity and performing transmission upgrades—on time and on budget.

Comprehensive project management is a key feature of JD Edwards EnterpriseOne Asset Lifecycle Management. Integrated procurement and contract management help you minimize costs by facilitating effective management of contractors from selection through payment. You can create requests for quotes, analyze competitive bids, and manage contracts more efficiently. You and your contractors gain visibility into real-time project data and down to individual costs accounts within large projects that can be continuously tracked against budget amounts.

Oracle's JD Edwards EnterpriseOne Project Management capabilities help you accelerate your time to completion for construction and engineering work, which means that your new assets are ready to produce revenue sooner. You can better manage the output of your labor and material resources—for both short-term and multiple-year construction projects. By viewing project feasibility before project changes reach the approval stage, you can reduce project risk. And real-time visibility into project status helps your project managers anticipate cost overruns and take action before problems escalate.

Because JD Edwards EnterpriseOne Project Management is an integrated solution, all data about construction and installation projects is shared among applications and stored in a central repository. This central file is available to managers and presented in the form of key performance indicators. Whenever they need more information, your managers can click individual indicators to drill down for full details. As construction activities continue, the solution uses this same information to capture financial details for asset capitalization and reporting purposes. Project Management also optimizes materials planning and reduces costs for contract labor by helping you more efficiently leverage the work of your own employees.

At the completion of construction and before putting the asset into production, you can create and capture baseline data about that asset. As a result, you can develop strategies to optimize maintenance as well as MRO inventories. JD Edwards EnterpriseOne Asset Lifecycle Management captures all the necessary data in a single step, while information entered about the asset can be shared for multiple functions across your organization.

Scenario 5: While ensuring that your capital assets are fully optimized, you need to maintain the highest level of employee productivity.

On the flip side of the asset picture are human capital assets. In an uncertain economic environment and demanding marketplace, your people must be as productive as the equipment they maintain and run. The effective coordination of managers, workers, and machines is possible only from an integrated, enterprise-wide software solution.

JD Edwards EnterpriseOne Asset Lifecycle Management improves productivity of managers, planners, field technicians, and equipment operators through specifically designed role-based workspaces and intuitive performance management portals. With integrated equipment maintenance and operations requirement planning, planners can make sure that when it's time to pull production machinery off the line for repair or maintenance, the people with the right skills and knowledge are ready to respond.

Workers have access to the system through a user-friendly interface that makes it easy for them to find what they need, when they need it. They are able to view and update work orders assigned to them and fill out timecards, and they can access a central knowledgebase that holds detailed information about equipment and describes reoccurring faults and failures and associated fixes.

Maintenance workers in the field can access the JD Edwards EnterpriseOne Access Lifecycle Management solution through laptops or handheld devices. They are able to track and update work orders, access the knowledge database, manage their schedules and timecards, request parts, or track purchases.

Managers also can make better decisions in less time. With web-based, performance management dashboards on their desktops, they have access to real-time data generated from any asset-related activity, including acquisition, project use, work orders, maintenance, emergency repairs, failure costs, and MRO inventory, to name a few. The data is fed into the equipment and cost analysis module so that managers can match costs with the assets that generated those costs—right down to the transaction level. Consequently, managers in all areas of the business are able to make well-informed decisions about individual assets that can keep costs from escalating out of control. The same information streamlines long-term capital planning, because managers will know which assets are accruing the most costs and which are not.

Oracle's JD Edwards EnterpriseOne Asset Lifecycle Management is a solution that brings together everything—and everyone—for the most efficient management of key assets, maintaining high productivity of machines and people, and achieving the highest return on your investments.

Oracle is committed to ensuring customer success and satisfaction by building quality products and delivering cost-effective, results-oriented service and support based on the unique organizational needs of our customers.

Oracle Global Services Committed to Your Success

Oracle Global Services for JD Edwards EnterpriseOne

Global Services provides worldwide, best-in-class services to help customers get maximum value from their software.

Oracle Consulting for JD Edwards EnterpriseOne

Oracle Consulting can help you implement, optimize, and upgrade Oracle's JD Edwards EnterpriseOne products to improve business performance. Consulting services accelerate time-to-value, maximize functionality, and reduce project timelines and costs. Implementations are tailored to specific business needs. Through a single-vendor relationship, customers gain deeper access to resources and get more value out of their software.

Oracle University

Executives, project managers, and end users benefit from role-based training that results in increased productivity, reduced risk, and lower support costs. Training delivered where, when, and how your organization needs it increases your overall return on investment. Products and services include project team training classes, end user training classes, the end-user training kit, and course development and delivery services.

PeopleSoft Hosting

Hosting services provided by PeopleSoft Hosting let you focus on your core business while realizing a superior return on your investment. You get a complete solution that ensures single-vendor accountability and provides world-class service.

Oracle Support Services for JD Edwards EnterpriseOne

Oracle Support Services never stop working to ensure that your issues are resolved and that you receive the greatest return on investment from your JD Edwards EnterpriseOne systems via the latest technologies, new product features, and industry best practices. You have access to the most comprehensive product and technical problem-solving expertise 24x7, with the real-time support you need for your real-time enterprise. Your business never stops moving forward. Neither do we.



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C14752-01