



# ORACLE UTILITIES OPERATIONAL SOLUTIONS

DELIVERING RELIABILITY,  
SECURITY, AND SCALABILITY  
FOR PERFORMANCE EXCELLENCE

## OPERATIONAL EXCELLENCE

Achieving operational excellence is a critical success factor for today's utilities. Delivering reliability and security, gaining return on capital expenditure, ensuring safety, and improving an aging infrastructure are just a few of the operational challenges that must be addressed.

Add the need to maximize investments, satisfy increasing customer demands, and ensure regulatory compliance, and it's no wonder electric, gas and water utilities are examining all aspects of their operations to determine what must be done more efficiently, effectively, and at a lower cost. From improving asset lifecycle management to optimizing field crews, utilities are adopting new methods to achieve operational excellence.

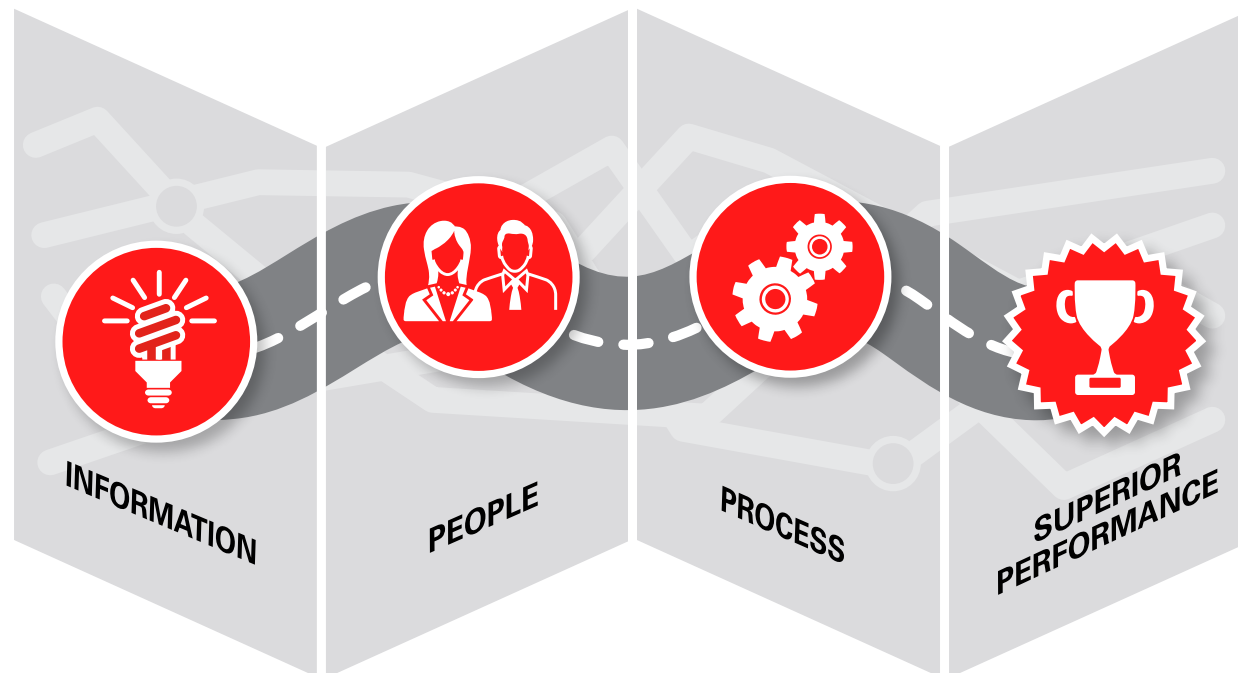


The key to achieving operational excellence lies in adopting the right technologies that enable your staff to develop strategic, efficient processes that deliver positive results and improve utility performance.

## THE ORACLE DIFFERENCE

For more than 30 years Oracle's industry expertise has enabled electric, gas, and water utilities of all types and sizes successfully navigate a wide range of mission-critical business challenges. Our solutions deliver an end-to-end, high value, low cost roadmap to achieving excellence across your utility's operations and are designed to optimize performance of your information, people, and process.

Oracle brings together a worldwide team of utility experts who understand your business, software applications that address mission-critical needs, a rock-solid suite of corporate operational software, high performance servers and storage, and world-leading middleware and technology. The results: flexible, innovative solutions that increase efficiency, improve stakeholder satisfaction, and address emerging business requirements.



## The Oracle Difference

### Information: Your key to understanding what work needs to be done

Performance optimization is achieved when utilities understand the value each task delivers prior to its execution. Using operational analytics and business intelligence, Oracle provides utilities with the insight to gauge and modify their current performance in real-time, as well as to prevent future problems from occurring by proactively addressing operational efficiency and optimization concerns, such as:

- Of the work to be done, what is most critical to address reliability, compliance, and asset risks?
- What parts of the infrastructure are failing, at what rate, and are they associated with a specific manufacturer, material, operating condition, or work practice?
- What time, resource, and budget risks exist for capital projects?

### People: Your key to work prioritization and execution

There is a critical link between planning and people when managing the real time assignment, progress, and performance of human resources across the entire work lifecycle.

With predictive planning and improved workforce visibility, Oracle helps you understand what personnel and skill sets are available to you at any time so you can best allocate and

apply them to the given day's unique requirements. You will be able to meet challenges head on, knowing that damage assessors, mutual aid crews, and other resources are quickly and continually delivering the valuable support you need—safely and at the lowest cost possible.

### Process: Your key to driving efficiency and performance

To achieve operational excellence, it is imperative to reduce waste, redundancy, inaccuracy, and excessive cost from the entire work lifecycle. That means you cannot afford technology or services that complicate workflow process by introducing inefficiencies or inhibiting human resource performance.

Oracle understands where and how both open- and close-ended processes should be automated across information and operations technology (IT/OT). This automation delivers meaningful operational cost savings via improved maintenance processes, reduced fuel costs and emissions, speedy fault location, and scalability to take on the massive data flows that come with service disruption events.

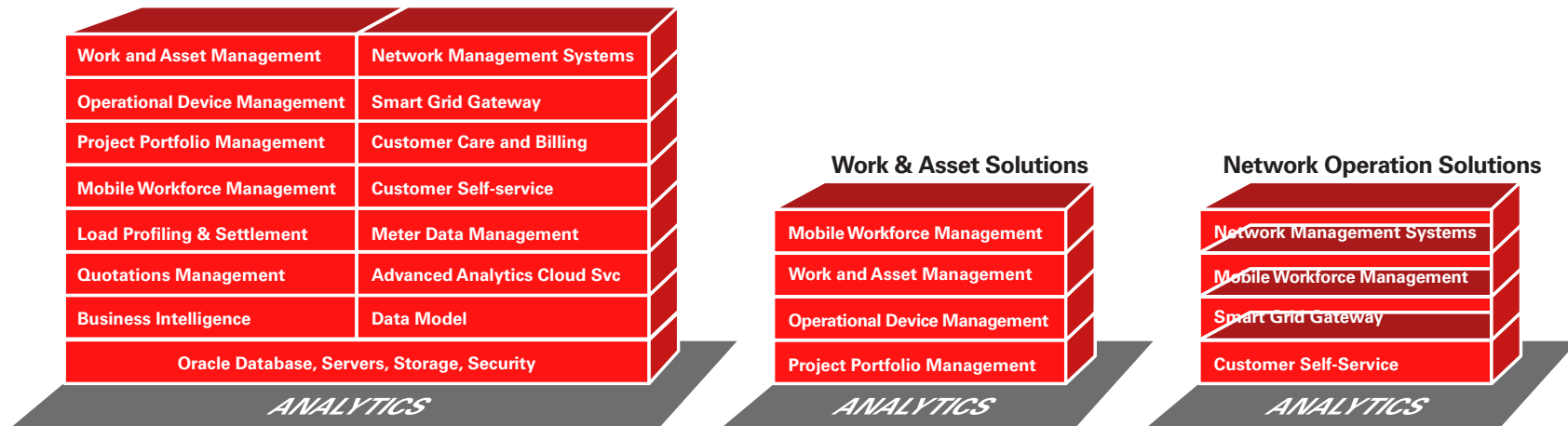
Further, Oracle provides utilities with superior, end-to-end project portfolio management for assets and devices, improving process associated with overhaul, construction, deployment and other related activities.

## SOLUTIONS

The optimization of performance requires the right tools for the job.

Comprised of Network Operation and Work & Asset applications, Oracle's operational solutions for electric, gas, and water utilities are comprehensive in scope, covering all major areas of utility infrastructure and field work. Capabilities within these solution areas provide the most complete approach for utilities to improve efficiency and achieve operational excellence.

### Oracle's End-to-End Solutions for Utilities



**Oracle Utilities Network Management System**, encompassing Oracle Utilities Distribution Management and Oracle Utilities Outage Management Systems, is the lynchpin that ties operational and business processes together. With it, electric distribution grids will have the scalability, predictability, and optimized performance necessary to provide the reliability and responsiveness required by your customers and regulating bodies. It can also be used to support gas distribution and water network trouble call and operations management.

— **Oracle Utilities Distribution Management System** provides the real-time decision support and automation needed for efficient and modern distribution, helping you manage challenges such as population growth, smart grid technologies, distributed renewable generation integration, electric vehicles, and the proliferation of beyond-the-meter consumer technologies. As Oracle Utilities Distribution Management System proactively balances current and future activity for you, you will be capable of maintaining a healthy grid now, as well as ensuring ongoing safe and reliable operation.

— **Oracle Utilities Outage Management System** gives you the peace of mind that comes from best-in-class performance proven to handle all aspects of major storms and outages. Pre-storm outage modeling, real-time network status updates, automated resource allocation and restoration estimation, customer communication management, and much more provide you with a broad array of purpose-built tools that improve the information flow and decision making needed to increase regulatory and customer trust.

**Oracle Utilities Work and Asset Management** gives you utility-specific, comprehensive asset lifecycle support, from planning through disposal—including all intervening acquisition, construction, maintenance, repair, and inspection activities—and can manage related purchasing and inventory. Here, you can rely on proactive and automated maintenance schedules designed to extend asset longevity and protect your capital investments. A common data model delivers a single source of truth support for all asset types—linear, distributed, plant, facility, and fleet—improving management and ensuring you avoid costly, ineffective add-ons and disparate databases that lack utility-specific enterprise capabilities. To drive additional cost savings, capabilities are configured, not customized, so you can experience ROI fast and improve efficiency and performance more quickly.

**Oracle Utilities Mobile Workforce Management** provides a centralized way to optimize the entire work lifecycle, ensuring the right people to the right job at the right time. You will deliver better service, safety, and network reliability by improving routine and complex work process, seamlessly managing internal workers and contract crews, and enhancing back office/field visibility and collaboration. Using real-time intra-day scheduling, you can adapt your workforce throughout the day, avoiding costly delays, repeat work, and inefficient allocation of resources. And by adding street-level routing you will drive fewer miles and complete more jobs—the first time and the right way—with the same number of people.

**Oracle Operational Device Management** ensures cost-effective inventory, asset, and configuration management of smart devices like digital meters, smart transformers, smart switches and relays, and field telecom equipment. This ability is critical when you have vast numbers of microprocessor-based devices with unique requirements that must be maintained, inspected, updated, replaced, and secured, in addition to countless other tasks. Providing comprehensive knowledge of each device's location, characteristics, health, firmware updates, configuration management, compatibility, scheduled battery replacements, audit compliance, and associated tasks, it acts as an automated lifecycle management and maintenance shop, injecting speed and accuracy into process and activities.

**Oracle Utilities Smart Grid Gateway** is the critical communications platform through which flows the high volume of data coming from all areas of the grid, end users, assets, and devices that must be connected to essential back-office enterprise systems. It automates the handling of data related to all events, ensuring it is delivered where and to whom it needs to go in a way that is useful. By enhancing your communication ability, it enables you to support what-if scenarios, outage modeling, and the delivery of detection, verification and restoration data. This centralized management is also crucial for scalability, where consistency and efficiency of information flow is necessary to the process of taking on more data.

**Oracle Utilities Customer Self Service** provides anytime, anywhere communication between customers and utilities, building a bridge to improve problem solving during storms and other disruptive events. From proactively engaging customers via their preferred communication mediums with restoration updates to capturing real-time input and images about potential damage from customers, you will continually demonstrate service excellence and commitment to your community at a time when it matters the most.

## Solutions

**Oracle Business Intelligence for Utilities** analyzes work, asset, outage, distribution, and device management, providing insight into how these areas affect a utility's total performance. With Oracle Business Intelligence for Utilities, staff can access easy-to-use dashboards, charts, and visualization tools to help formulate and support their decisions. You can also combine analyses from other departments to aid executive and board-level decision-making.

Oracle Utilities Business Intelligence for Utilities is the foundation for Oracle Utilities Analytics Dashboards—pre-built tools for standard reporting and performance tracking—and many other analytics products in Oracle's enterprise application portfolio.

**Oracle Utilities Advanced Analytics Cloud Service** delivers operational analytics of devices, grids and networks. You begin by feeding selected data streams, such as smart device or feeder load performance, to experts who analyze it using a set of leading edge technologies. Drawing on sophisticated algorithms, they mine your data for common indicators of problems and inefficiencies, returning a series of compelling recommendations based on clear evidence that you can then turn into action items that lead to quantifiable results.

**Oracle Primavera P6 Project Portfolio Manager** provides world-class management of all long- and short-cycle projects—construction, complex overhauls, major and routine maintenance, as well as capital-intensive initiatives—that need strict oversight, safety assurance, and budget control. Encompassing project prioritization, planning, management, and execution, it continually automates the alignment of work with the value it delivers. Via real-time insight and reports, executives are then assured that at all times the work being executed is the most valuable activity for the utility and that crews have all the necessary resources to complete it on time and within budget.

By delivering enterprise and permission-based visibility and control of all asset work from start to finish, it also removes the challenges associated with electric grids and water networks that extend over great distances.

**Oracle Utilities Express Implementations** complement Oracle's operational solutions by ensuring an efficient and effective implementation. Leveraging knowledge and best practices of the utility industry, Oracle significantly compresses the time for you to begin receiving value and return from your investment in outage management and mobile workforce scheduling. By melding applications, middleware, hardware, and database, you will significantly reduce costly and customized development time by weeks and months as you accelerate toward full production. Additionally, templated business process, pre-configured data conversion tools, training and standardized interfaces overruns and risk.



## SERVICE AND VALUE: DELIVERING MORE VALUE AT A LOWER COST

Stretched budgets, renewable generation mandates, workforce skill gaps, and heightened expectation for capital investment return are just some of the pressures mounting on you to “do more with less”.

With its extensive experience designing utility-specific solutions and its rich history in data and process management, Oracle can help you meet the challenges of cost containment. Our Consulting Services team delivers value during implementations that ensure you steer clear of unnecessary functionality you will never use or limited technology that inhibits performance. You benefit from critical capabilities

that help you cost-effectively achieve a streamlined, superior production environment, including:

- Extensive out-of-the-box process flows, built upon utility best practices, for full visibility and accountability and flexible business rules encompassing virtually all work scenarios
- Productized integrations to reduce development expenses and automate work and information management process that crosses operational systems
- Tailored training, management, and geographic localization to accelerate time to productivity
- The largest partner network of system integrators to ensure you get the capabilities you need delivered the right way and on time



## OUR COMMITMENT

Today's electric, gas, and water utilities need software applications and technology to serve as a robust springboard from which to meet the challenges of the future.

That's what Oracle offers. Oracle Utilities' single applications and multiple, integrated solutions meet customer needs while addressing the concerns of financial stakeholders, employees, communities, and governments. Oracle offers innovative operational, analytics, and business solutions backed by decades of experience in helping utilities meet the challenge of change so that they can achieve performance excellence and enhanced customer service.

◀ To learn more, please visit [www.oracle.com/goto/utilities](http://www.oracle.com/goto/utilities).

 | Oracle is committed to developing practices and products that help protect the environment

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