

# IFS APPLICATIONS" FOR ENERGY & UTILITIES



### **OUR SOLUTION'S DNA**

When we first set out to create IFS Applications over 25 years ago, our goal was to make the most usable business software on the market. And to help us achieve that ambition, we put simplicity at the forefront of everything we did.

### We still do.

We decided that we would make only one product, which can be easily configured to match the specific requirements of a broad range of industries.

### We still do.

We decided that we would build IFS Applications on standards so our customers would not be locked into any particular technology.

### We still do.

We decided to design IFS Applications as a component-based structure so it can be easily extended and updated.

### We still do.

We decided that each software component must be totally compatible with every other, yet capable of running independently.

### We still do.

We decided to build a product that could handle change and long-term evolution. **We still do.** 

And, that we would make the most user-friendly business software on the market. We still do that, too.

### A HERITAGE OF SOLUTIONS

IFS is the only broad business software vendor whose origins lie in the development of an enterprise asset management (EAM) solution for utilities.

The energy and utilities industries remain a primary IFS segment, with customers worldwide, including some of the world's largest power generation projects, national grid corporations, nuclear power plants, and multinational energy generation, transmission and distribution companies.

Extremely scalable, IFS Applications provides the same reliable support to companies with many thousands of users as it does to plants having fewer than a dozen users.

Besides innovative EAM and enterprise resource planning software for regulated and deregulated energy and utility markets, we deliver project, supply chain and service functionality. The result is a complete asset lifecycle management (ALM) solution for all your requirements, from initial facilities engineering and construction through daily operations and maintenance, all the way to decommissioning. We also support all core enterprise functions for managing finance, inventory and human resources, including multi-site, multi-currency, and multi-language environments.



# UTILITIES DELIVER THE STUFF OF LIFE

Delivering electrical power and other basic utilities to the world's growing population is one of the 21<sup>st</sup> century's most compelling issues. The Maconda Deep Horizon catastrophe in the Gulf of Mexico and the Fukushima nuclear accidents in Japan are only the most dramatic examples of the risks involved in largescale capital-assets development and operations.

The challenges facing the energy and utilities industries include satisfying some of the most basic of human needs. Growing demand and supply uncertainty can lead to volatile costs and pricing. Also of grave concern are security, safety and environmental issues, as well as taxation and regulatory efforts that all too often are erratic and hard to predict.

The business model for the energy and utilities industries is asset-driven, based on the forecast, planning, construction, operation and maintenance of infrastructure, with service delivery at a reasonable rate of return.

In many markets, power generators are under

pressure from owners to improve return on investment. In others, regulators keep a watchful eye and pressure for reduced pricing.

Other risks follow from a rapidly aging infrastructure and workforce. Yet the financial incentive to make needed infrastructure and human resource investments is often unclear. Managers do more with less, squeezing better performance, longer life and higher efficiencies from existing assets. For new assets, increasingly complex technologies—and the breakup of vertically integrated enterprises—make owner-operators and engineering, procurement and construction (EPC) companies increasingly dependent on contractors and suppliers for goods and services. Hugely complex projects increase risk and possibilities of delay.

At the same time, advanced technologies are being applied to an installed, disparate base of legacy installations. Too often, significant elements of this installed base are no longer supported, insufficiently documented, or not easily integrated with. This makes information difficult to find, or once found, trust.



IFS helps you to deliver the right stuff, meeting customer needs in an era of growing demand and squeezed resources. We are ready to help you address these globalization and technology challenges.

# AN INTEGRATED, CONTINUOUS PROCESS

To reduce risk and increase productivity, it's better to manage the entire utilities asset lifecycle as an integrated and continuous process—from up-front planning to plant obsolescence. But without a true integrated extended enterprise system you have no system of record for in-context data analysis. In this case, a serious barrier remains to efforts to increase productivity through better use of information technology.

IFS offers full enterprise-suite functionality—it's a one-stop shop—for companies in the energy and utilities markets. IFS Applications is a single solution based on a common integrated platform with a welldefined strategy going forward. It also can complement corporate systems by supplying unmatchable, comprehensive enterprise-asset management functionality.

From its inception, IFS' deep knowledge and experience of best practices in maintenance and facilities management were key factors in the development of IFS Applications.

Our asset lifecycle management approach brings those responsible for a plant's design and construction together with those who will operate and maintain it. It puts operations and maintenance on a common system that includes ties to real-time automation systems. It supports the various informational needs of a wide range of stakeholders. Document management brings structure and control to document-driven business processes.

BUSINESS PROCESSES	DESIGN 🔁 SUF	PPLY & 📀 CONSTRUCT	ᅙ MAINTAIN 💿 REFURI	BISH ODECOMMISSION	
APPLICATIONS SOLUTIONS	CORPORATE PERFORMANCE MANAGEMENT				
	General Ledger Sales Ledger	FIN Purchase Ledger Cash Flow	IANCIALS Fixed Assets Budget Management	Cost Control Consolidated Accounts	
	PROJECT MANAGMENT		ASSET MANAGEMENT		
	Project Planning Project Templates Estimating WBS Resource Planning Resource Allocation Workflow & Action Lists	Budgeting Cost Control Time & Expenses Procurement Material Planning Progress Document	Asset Data Mgmt AIIM Corrective Maintenance Prev. Maintenance CondBased Maintenance RCM Scheduling Resource Allocation	Work Orders Lock-Out/Tag-Out Time & Attendance Mobile & Wireless Material Management Tools & Facilities Process Automation Integration (OPC, etc)	
Human Resources Health & Incident Management					
SUPPORT PROCESSES	Document Management		Procurement		
	Supplier Collaboration		Supply Chain Management & Inventory		
	Fuel Management		Plant Planning & Optimization		
	DCS/SCADA/Outage Management		GIS, CIS, or Energy Trading		

The diagram illustrates the depth of functionality that makes IFS Applications such a powerful business tool. With the focus on solutions that address industryspecific issues you are able to increase competitiveness and raise quality standards while minimizing costs.

# FOSTER COLLABORATION AMONGST HIGHLY TRAINED INDIVIDUALS

IFS Applications supports the total asset lifecycle, including for EPCs, for planning, engineering, construction and commissioning. Through its integrated ERP, asset, project, service and supply chain management functionality, all stakeholders play off "the same sheet of music" with a common set of consistent data.

### **ASSET DESIGN AND PLANNING FOR EPC SUPPORT**

The capital-construction industry must address the tremendous expense of stove-piped systems for different project stages. Having all project data in one system during design, engineering and construction ensures owner-operators and EPCs work with current data. Transition to operations is smoother, with equipment data available from the start.

While design work is accomplished by means of computer-aided design (CAD), IFS Applications serves as the system of record for asset design, planning, data management and engineering change management, furnishing stakeholders with consistent, accurate information regarding asset infrastructure. The result is improved collaboration, decision making and control of critical external suppliers. Construction projects are less risky and easier for owner-operators and EPCs to manage.

### **PROJECT MANAGENT**

Project-based solutions deal with the increasing size and scale of capital construction, whether plant or network construction or revamps. Automated collaboration with important sub-contractors and suppliers leads to optimized resource use.

- Risk management improves via a "review, evaluation and action" process that identifies issues.
- Scheduling capabilities manage time and resources, including with IFS 360 Scheduling for mobile workforce scheduling and optimization.
- Contract cost controls record work progress and contract baseline revisions while managing payment activities. User-defined project cost elements better fit needs.
- It's easy to integrate with systems such as Microsoft Project<sup>™</sup> and Oracle Primavera<sup>™</sup>

### THE SUM IS GREATER THAN THE PARTS

Besides our capabilities for ERP and EAM, IFS has invested in the engineering support and project management functionality appropriate to development, operations and management of capital-intensive asset infrastructure. That's what asset-lifecycle management is all about.

IFS' product development is market-driven and based on the changing needs of the industry. IFS Applications' inherent flexibility, based on a robust technical platform, leaves its industry users ready to respond to market and technology changes that can't as yet be fully anticipated.

### WORK AND ASSET MANAGEMENT

Better ways are needed to support collaboration among highly trained professionals, internal and external to your organization.

- For a comprehensive business view, utilities need asset management integrated with a financial or enterprise system.
- With equipment-monitoring advances, predictive maintenance and reliability-centered maintenance (RCM) bring structure to programs and reduce cost. RCM establishes safe, minimum levels of maintenance, supports changes to operating centers and establishment of capital management regimens. RCM in IFS Applications includes support for failure mode, effects and criticality analyses (FMECA, and task identification. Risk, cost and environmental concerns are balanced.
- Maintenance efforts are better directed and inventory control improves with tight integration between EAM and procurement.
- Capital is freed and earnings increased through supplier evaluation in combination with contract and inventory management.
- Contract management ensures service providers fulfill terms and conditions, meet service level agreements and achieve committed cost savings.

#### **SUPPLY CHAIN MANAGEMENT**

IFS Applications supports the different steps in the information supply chain that asset-intensive companies participate in during projects and revamps. Integrated supply chain management of procurements, inventory and vendors means better availability of goods and services associated with forecasts of planned and unplanned work.

Companies can benefit from multi-site agreements and common purchasing processes. Costs can be cut through reducing capital tied up in inventory. Securing the availability of spare parts optimizes the supply chain.

### SERVICE PROVIDER MANAGEMENT

Utilities increasingly use external service providers for labor and management services. To start, this trend focused on peak-labor periods and special services during plant outages. More recently, European and some US utilities are restructuring service-related aspects of their business as separate entities.

IFS was early in developing capabilities to manage third-party service providers as an integral part of the utility enterprise.

### **PROCESS AUTOMATION INTEGRATION**

Collaborative maintenance and operations efforts gain through process automation integration, including distributed control (DCS), supervisory control (SCADA) and geographic information systems (GIS).

IFS was the first ERP vendor to integrate with process automation systems using OPC as a standard platform. OPC is today the dominant means for achieving these types of integrations. Going forward, IFS has a deep understanding of automation solutions from leading vendors.

Service-oriented architecture (SOA) and the proven benefits of components and object orientation allow other application solutions to access data and invoke functionality in IFS Applications through fully exposed business objects.

IFS places a high priority on user interface and workflow improvements that make its applications accessible, highly usable and fun. By doing so we are addressing issues related to an aging workforce and a new generation of computer users.

We have a worldwide network of offices and partners to ensure that support is always local. Installation, consulting and maintenance are offered via IFS offices or partners with long experience, both within the energy and utilities sector and with our solutions.

### **ABOUT IFS AND IFS APPLICATIONS**

IFS is a public company (OMX STO: IFS) founded in 1983 that develops, supplies, and implements IFS Applications<sup>™</sup>, a component-based extended ERP suite built on SOA technology. IFS focuses on agile businesses where any of four core processes are strategic: service & asset management, manufacturing, supply chain and projects. The company has more than 2,000 customers and is present in 50+ countries with 2,700 employees in total.

If you are interested in further information, e-mail **info@ifsworld.com** or contact one of our regional offices or visit our web site: www.IFSWORLD.com

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