

## Industry Specific Capabilities - Oil & Gas



■ Asset Development & Build-Out	■ Product Development & Manufacturing
■ Maintenance Management	■ Service Management

In addition to the comprehensive, horizontal capabilities provided by the Oracle E-Business Suite, the following capabilities were specifically added to satisfy the Oil & Gas industry:

### Asset Development & Build-Out

#### **Advanced Product Catalog (and CADView-3D)**

Capture and store version-controlled designs (item specifications, documents/drawings, etc.) and BOMs in a common repository. View large CAD files using video streaming over the Internet. Enable partner collaboration via secure, cross firewall role-based access. Track progress and monitor issues, enhancements and change requests throughout the asset design process.

#### **Contract Management**

Electronically author contracts (including standard T&Cs, flowdown provisions, etc.) and maintain project schedule, status and cost change documentation.

#### **Deliverables Tracking**

Track and monitor the status of all contractual obligations and deliverables (submittals, transmittals, progress reports, payment schedules, etc.).

#### **Scheduling Tools Integration**

Integrate project information (WBS, cost, hours, quantity, resources) with common 3rd party scheduling tools (MS Projects, Primavera) to provide accurate assessment of trends, percent complete, and forecasted estimates to/at completion. Leverage schedules to drive Engineer To Order lead times, manage shop floor resources, initiate procurement and sourcing activities. Support client and "as work is planned" Work Breakdown Structures.

#### **Resource Deployment**

Staff project resources based on automated skills and availability search criteria. Create and share single resource definition, including skills management, recruiting and training.

#### **Status Reporting**

Define multiple types of status reports for each project. Leverage color-coded graphical indicators to easily

communicate project status. Configure reminders for status updates and view and approve status reports via email.

### **Issue and Change Management**

Track, manage and resolve all project related issues in a single secure location. Identify critical issues and communicate all relevant information (status, priority, due date, source, classification) to team members. Provide threaded discussions and flows to ensure changes are incorporated and version control is maintained.

### **Project Performance Management**

Provide management visibility into financial project information to monitor project performance. Review and adjust expenditure items; review and approve invoices; and analyze overall financial status (year-to-date, quantity, budgeted amounts, etc.) at the project, task or resource level.



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## **Maintenance Management**

### **Asset Maintenance**

Enable predictive and preventive (scheduled) maintenance of assets (equipment) with minimal disruption to service delivery / production capability. Provide immediate and dynamic response to preventive maintenance plans based on seasonal or capacity changes in production. Capture meter results and create preventive maintenance plans for serialized & non-serialized rebuild items.

### **Asset Maintenance Component Picking**

Enable integration of Inventory to Enterprise Asset Management (eAM) to support work order related component picking.

### **Sourcing**

Define and execute a complete sourcing strategy, from spending pattern analysis to supplier performance tracking, negotiation, evaluation and contract/PO creation. Perform multi-attribute bid analysis to rank the best source of supply according to defined attributes.

### **Supplier Collaboration**

Facilitate convenient, secure self-service business transactions between buyers and suppliers via the Internet. Allow suppliers to instantly view purchase orders, acknowledge orders to indicate capability to fulfill the demand, submit change order requests to promised delivery dates, or alert the buyer to upcoming shipments by posting Advance Shipment Notices

(ASNs).

### **Global Purchase Agreements**

Support Global Agreements spanning a buyer-defined list of organizations. Negotiate enterprise-wide pricing, and execute and manage agreements in one central shared services environment. Access agreement to create purchase orders to pre-negotiated prices and terms.

### **Direct Materials Procurement**

Automate procurement processes for all direct materials. Enable procurement professionals to define rules for purchase order approvals and notifications and modify approvers / reviewers according to changing business rules.

### **Create Order**

Support Chemicals and Oil & Gas industry trading exchange standards using 9iAS (or 3rd party middleware). Enable trading partners to easily implement either the buy-side or sell-side of the Order Create message.



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## **Product Development & Manufacturing**

### **Product Development for Process Manufacturing**

Formulate a new product by creating new formulas or copying / modifying existing formulas. Leverage analysis tools to model and predict physical or technical characteristics of the finished product based upon ingredient characteristics to finalize formula structure.

### **Recipe Maintenance**

Specify the conditions under which a recipe can be used to accommodate seasonality or differences in equipment and raw materials from plant to plant. Each production run is based on a copy of the master formula so adjustments can be made for ingredient quality in each run.

### **Manufacturing Scheduler with Process Production**

Finitely schedule and sequence production batches down to the resource instance and view or modify the results with the Gantt Chart.

### **Integrated Maintenance and Production Planning**

Enhance service planning capabilities. Downtime for specific resources that results from maintenance activity planned in eAM is communicated to ASCP. Therefore, ASCP will take asset downtime in account during planning.

### **Shift Level Reporting**

Achieve an accurate, real-time view of inventory status by subtracting allocated ingredients from inventory simultaneously at the beginning of production, or incrementally as ingredients are consumed at the end of each shift.

### **Dual Unit of Measure / Potency**

Use two simultaneous units of measure for catch weights and potencies.

### **Production Management and Process Controls**

Ensure manufacturing consistency throughout the production cycle by providing tight control of ingredients and processes, yet maintain flexibility to respond to changing conditions. Scale batches up or down based on anticipated quantities and calculate expected theoretical yield percentage.

### **Quality Management**

Via the Internet, disseminate real-time quality information using grade, lot status, and other characteristics to all functional areas of the enterprise. Facilitate continuous quality tracking throughout manufacturing by providing visibility into all phases of production – raw materials, intermediates, bi-products, sub-lots, final products.

### **Integrated Process Quality Workbench**

Standardize testing methodologies to enforce quality inspection throughout the supply chain by using global specifications and workflow notifications. Drive updates to status, grade, and shelf-life of inventory via flexible specification approvals, version control and usage rules, automated sample numbering, detailed sample tracking and analysis, and decisive results evaluation.

### **Lot Traceability**

Establish an inventory traceability number for lot and sub-lot control. Restrict product usage based on item-specific shelf life, retest intervals and potency. Trace materials enterprise-wide from receipt through customer shipment of completed product.

### **Regulatory Management**

Automate the creation and maintenance of hazardous materials documentation to support compliance with industry and government regulations. Provides hazardous material reporting, document definition and audit trail, and rule-based dispatch management.

### **Process Industry Tutor Procedures and Business Flows**

Document standard operating procedures (SOPs) for compliance by using best practice templates and procedures

for process industries.

### **Detailed Shop Floor Data Management**

Enforce global manufacturing consistency via tighter step level integration with Process Quality and Process Parameters, which define and capture actual resource data (e.g., temperature and speed). Routing, Operations, and Resources APIs provide additional integration capabilities.

### **Cost Management**

Combines detailed cost tracking features with flexible analytical tools to help determine true product costs. Provides comprehensive "what if" analysis and inventory valuation.



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## **Service Management**

### **Field Service Management**

Create a unified view of all service calls and centrally manage all field service aspects to improve accuracy of service windows and ensure adequate staffing. Assign and dispatch field technicians to new service activations and service calls.

### **Service Request Fault Linkage**

Link all service requests that are associated with a specific fault trouble ticket.

### **Service Request (SR) Status Propagation**

Link service requests to the dependent SR and automatically propagate the status. For example, the system automatically updates the status of all similar SRs created during an outage (e.g. pipeline burst) to 'cleared' when the root cause SR to fix the pipeline is closed.