Oracle Enterprise Asset Management

Optimize Asset Utilization

ORACLE 12
E-BUSINESS SUITE

ORACLE ENTERPRISE ASSET MANAGEMENT

KEY BUSINESS BENEFITS

- Improve asset visibility, tracking, and control with a single global asset repository

- Drive maintenance best practices using preventative and condition-based maintenance strategies

- Empower all users to do their work anywhere using any device: desktops, laptops, tablets or mobile phones

- Replace costly stand-alone maintenance systems with Oracle's integrated solution

KEY FEATURES

ASSET MANAGEMENT

- Intuitive Asset Group definition

- Flexible asset creation: Manual, template, open interface / business API

- Ability to change an asset number without losing its attributes and history

- Parent / child asset hierarchy with cost rollup

- Support for all types of asset locations: User-defined areas, internal inventory locations, external physical locations, etc.

- Fully supported asset moves and asset transfers, preserving asset attribute integrity, maintenance strategy and history

- Ability to map GIS and Maintenance assets

Oracle Enterprise Asset Management provides comprehensive planning, tracking and execution to support **optimal asset monitoring and performance**. Its sophisticated, **condition-based maintenance strategies** for plants, property and public infrastructure along with an integrated asset repository ensures best practices and quality compliance globally. Oracle Enterprise Asset Management (eAM) eliminates excess and obsolete spare parts inventories**, promotes environmental, health and safety policies,** and improves coordination of production and maintenance schedules.
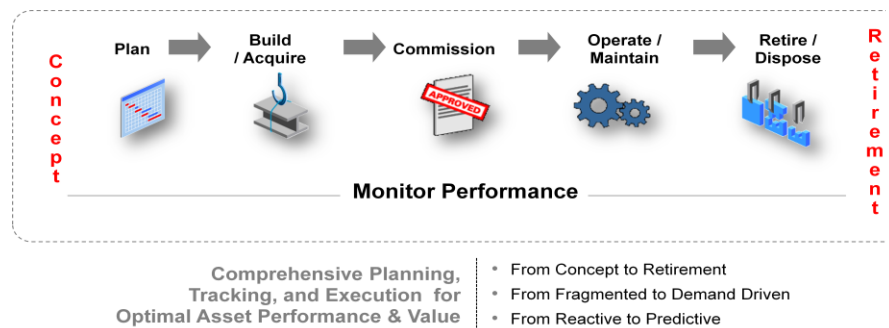

Figure 1: Comprehensive Asset Management

Asset Tracking with a Global Single Asset Repository

Asset lifecycle tracking has become an increasingly important issue for organizations with a large asset base. The lack of visibility and accurate and timely updates of assets leads to unnecessary purchases of equipment, high asset carrying costs, and excessive regulatory fines. It is imperative for capital-intensive companies to know the exact number of the existing assets, their current value, and location and maintenance history. Without this vital information, it is challenging to properly plan, procure or construct and deploy assets, or perform maintenance activities.

Oracle Enterprise Asset Management makes it easy to define and manage your organization's multitude of assets. By establishing Asset Groups, users uniquely define groups of assets of the same type. Once established, users can associate standard information that can be inherited by the assets belonging to that group. Unlimited user-defined asset attributes can be used to store detailed information, such as nameplate data and engineering specifications. Parts list of an asset or group of assets belonging to the same Asset Group can be maintained in the Asset Bill of Materials. This allows you to quickly identify necessary parts at time of maintenance.

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- Fixed Asset and Property linkage to Maintenance Assets
- Ability to associate assets to production equipment
- Equipment downtime visibility for production planning
- Asset check-in / check-out
- User-specified asset operations log

PREVENTIVE AND CONDITION-BASED MAINTENANCE

- Support for pre-defined asset maintenance activities (bill of materials and routing)
- Rule-based preventive maintenance strategy definitions (date rules or meter rules), including
- Multiple-activity preventive maintenance
- Base date / base meter preventive maintenance
- Support for global and organization-specific PM
- Easy meter definition and meter hierarchy setup
- User-controlled forecast generation and resulting automatic work order creation
- Failure analysis
- Support for predictive maintenance with user-defined collection plans

COLLECTION PLANS

- Pre-defined collection plans
- Collection of inspection, RCM and downtime, user-defined variables data
- Rule-based creation of work requests and work orders

WORK MANAGEMENT

- Streamlined work requests with approval Workflow
- Support for service requests initiated in Oracle Service
- Inspection, lubrication and routine preventive maintenance work orders
- Emergency work orders
- Pre-planned work orders
- Audit trail
- User-defined work order types and work order statuses
- Work order relationship, including parent / child and follow up work

Streamline Asset Operations

Oracle eAM allows organizations to setup assets in a hierarchical structure with parent-child relationships. This hierarchical structure makes it easier to find and group assets as well as roll up asset costs. For example, a top-level asset would be defined as a company's office building and the child assets would be defined as each individual floor of the building. This structure could be further defined by establishing a relationship between offices and floors.

Asset Operations Management provides the following capabilities: Asset Moves and Transfers; Asset Check-in and Check-out; Asset Operations Log; Reference Documents and Safety Procedures; Preventative and Condition-Based Maintenance Activities and Schedules; Meters; Failure Analysis and Quality Collection Plans.

Preventive Maintenance (PM)

Activities are used to create a library of Preventative Maintenance (PM) procedures. PMs include inspection, lubrication and routine maintenance work. Once PM procedures are created, they are associated with assets and are automatically scheduled as work orders based on meter readings, list dates or time intervals. When implemented, a PM program helps an organization run more effectively and efficiently, with fewer unexpected breakdowns because the equipment is well-maintained.

Meters

Through the collection and review of vital asset statistics, managers can make smart decisions on the maintenance and effective usage of assets and rebuildable inventory items. Meters attached to an asset or rebuildable inventory item can be used to report on operating conditions such as oil pressure, vibrations and temperature. Oracle eAM offers unique capabilities to define multiple meters for assets and allows multiple assets to share meters. Any readings for a meter are immediately updated to all associated assets.

Collection Plans

Oracle eAM integrates with Oracle Quality to define flexible and configurable data collection requirements. Data collection results can trigger powerful automated response and follow up actions. If the collected data results in a condition outside the acceptable limits defined in the collection plan, a work request or work order can be created. Reliability Centered Maintenance (RCM) can be implemented easily with collection plans.

Asset Visualization

In many environments, the ability to see where the assets are located is critical to effective planning and scheduling of work. This is often seen in maintenance environments with disparate assets – such as in utilities. Oracle eAM is integrated with the Web-based source map viewer of Oracle Spatial, Google Maps and ESRI to allow users to view Assets and related work on a map. The map integration also provides

orders

PLANNING AND SCHEDULING

• Planner's workbench (Maintenance Workbench)

• Preventive maintenance forecast generation and work order implementation

• Maintenance Budget Forecasting

• Construction Estimation

• Integration with plant operations

• Single-page user interface for work order creation and scheduling

• Extensive work scheduling abilities, including part requests, equipment resource scheduling and employee scheduling

• Easy parts inventory look up from work orders and from the Maintenance Workbench

• Easy workflow configuration for work order approval

WORK EXECUTION

• Rebuildable component replacement

• Work hand-over (ability to hand over uncompleted work to other crews and shifts)

• Ability to post work time by work order, project or crew

• Flexible work completion process options (for specified work steps and / or work order)

• Data capture at work order completion (meter readings, collection plan entries, failure data)

• Mass data entry (meter readings, charge time, work order completion, work order close)

• Support for Safety Management including Permits and Work Clearances (LOTO)

• Supplier self-managed work operations from iSupplier

• CFR 21 Part 11 implemented for work order completion

• Maintenance intelligence

• Maintenance key performance indicators delivered by Oracle Daily Business Intelligence (DBI)

the ability to locate work on a map and initiate basic execution tasks like creating work requests and work orders.

Linear Asset Management

Oracle eAM supports Linear Asset Management to address the business needs for industries such as Oil & Gas (pipelines), Utilities (transmission and distribution lines), and Public Sector (roadways, rails). When creating linear assets in eAM, users can attach a Linear Reference Method, optionally define a Linear Asset Segment, and map the asset / segment to a GIS route or geometry. Linear asset attributes from GIS domains such as properties and elements can be defined and associated to the assets so that they can be used as reference details while planning and executing maintenance work on them.

Efficient Work Management

Work Management is at the core of all maintenance operations and includes the identification of maintenance issues through work requests, and provides the ability to execute maintenance work through work orders. By creating a work request, you initiate a process, notifying the maintenance supervisor that an issue is encountered and resolution is requested. Oracle Workflow is utilized to route work requests through approval process. If work is deemed necessary, the work request is approved and a work order is created for the request. The express work order feature facilitates reporting subsequent work from the field to system while debriefing of work orders helps in quick reporting of all transactions for work execution.

Information Discovery

Oracle E-Business Suite Information Discovery for Enterprise Asset Management allows users to quickly find the information they need to respond to real time issues and decision opportunities. Oracle Enterprise Asset Management Information Discovery enables users to:

• Increase Asset utilization by discovering assets with frequent failures and drill into asset details to find root cause

• Reduce maintenance costs by identifying overloads and optimize resource assignments, improving schedule compliance by addressing bottlenecks

• Improving 'Maintain' vs. 'Replace' decision making with better insight into Asset costs

• Improve supervisor productivity by providing visibility of Assets, Work Orders and Parts across organization while improving work prioritization

Mobile Maintenance

Oracle Mobile Maintenance for Oracle E-Business Suite allows maintenance technicians to view and execute maintenance work on the go. The Mobile Maintenance app allows users to perform the following tasks on Android and iOS-based devices:

• Complete assigned work, including issuing material and charging time

- Complete operations and work orders

- View asset work history, failures, meter readings, and location

- Record asset meter readings

- Create simple work orders and work requests

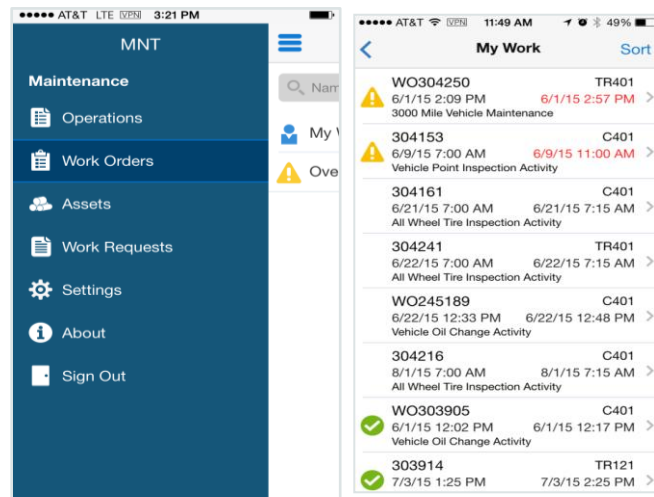- Collect quality and inspection plan information

Figure 2: Mobile Maintenance on a Smartphone device

Oracle E-Business Suite: The Complete Solution

Oracle E-Business Suite enables companies to efficiently manage customer processes, manufacture products, ship orders, collect payments, and more - all from applications that are built on unified information architecture. This information architecture provides a single definition of your customers, suppliers, employees, and products - all important aspects of your business. Whether you implement one module or the entire Suite, Oracle E-Business Suite enables you to share unified information across the enterprise so you can make smarter decisions with better information.