



AVEVA

# ENTERPRISE ASSET MANAGEMENT

Collaborative asset management for  
the enterprise

Through your HMI and SCADA systems, your organization has already experienced the impact that meaningful data has on your daily operations. Real-time information, displayed in context, means your personnel can easily identify abnormal conditions, focus their attention immediately on problems, and interact with your machinery from anywhere in the world.

Your assets are continually generating huge amounts of information, but how much of this data do you miss? How much do you not see, not interpret, and not use? By reading and responding to this data effectively, you can get much more out of what you already have. Asset Performance Management helps you streamline your processes, increase reliability, reduce downtime, and achieve asset performance excellence.



---

## Product at a glance

- An enterprise level solution that accommodates multiple businesses or sites in a single solution
  - Ensures labor, material, tools, drawings, subcontractor requirements and safety information can be identified on work orders to support proactive maintenance activities
  - Preventive maintenance function helps users proactively manage and plan maintenance
  - Helps minimise inventory costs, helps ensure spare part availability and provides extensive analysis capabilities
  - Automates requisitions, purchase orders and quotations with contract and invoice matching
  - Approval and workflow capabilities reduce administrative workload and provide enhanced flexibility
  - The Industrial Rapid Implementation Methodology (InRIM™) ensures a risk-free implementation using field proven best practices
- 

Combining world class EAM capability with powerful condition monitoring and management capabilities can turn huge volumes of production data into actionable asset intelligence in real-time, enabling informed decision-making at every level of the production enterprise.

### Maximise Asset Reliability and Utilisation

AVEVA has the products, services and domain expertise to meet your business requirements from the production line to the bottom line. AVEVA's Avantis.PRO Enterprise Asset Management Suite enables your enterprise to do more than simply maintain assets.

It is designed to meet the sophisticated maintenance and materials management requirements of today's asset-centric organisations. Furthermore, it is fully and seamlessly integrated with distributed control systems on the plant floor; and it incorporates and responds to predictive condition monitoring processes.

The Avantis.PRO Enterprise Asset Management suite provides the insight you need to make informed business decisions and manage all of your assets with confidence.

### Access to Decision Support Information

Every decision you make is dependent on the quality of information available to you. While most EAM offerings are capable of capturing vast amounts of data, users often find it difficult to access and interpret this data. The industry standard architecture transforms data into information you can use, quickly and easily, providing true asset intelligence. Remote, casual, executive and expert users are all empowered by the ability to access critical information across the enterprise, when and how they need to see it.





## Avantis.PRO Enterprise Asset Management

Avantis.PRO Enterprise Asset Management is a comprehensive Solution that provides maintenance, procurement, and inventory management for asset intensive industries.

### Entity Management

Avantis developed the entity concept to maximise the flexibility of a typical equipment database. It supports the management of both maintainable and organisational entities, as well as tracking capital projects and related tasks and expenditures. Maintainable assets include anything that needs to be repaired, such as a piece of equipment, assembly line, mobile asset or IT assets. Organisational entities refer to any arrangement of your enterprise that is used to collect cost, statistical, budget or backlog information such as a division, cost center or department. The Avantis.PRO Enterprise Asset Management product allows "parent-child" relationships to be defined and built into multiple hierarchies for cost rollups and operating statistics.

### Work Management

Work management ensures that maintenance personnel can manage and plan incoming work requests as well as automatically generated work from preventive maintenance programs. The planning function ensures that labor, materials, tools, drawings and subcontractor requirements, as well as safety information, can be identified on work orders to support proactive maintenance activities. With the Avantis.PRO Enterprise Asset Management product, plant floor personnel are empowered to enter, manage and view entity-related activities. In addition, integration with the inventory and procurement functions ensures material availability, improved productivity of maintenance staff, better communication of needed supplies and complete costing of all activities.

### Preventive Maintenance

The Preventive Maintenance (PM) function of Avantis.PRO Enterprise Asset Management offers the ability to create a library of standard, repeatable jobs with automatic work order generation (based on any combination of user-defined triggering criteria: operating statistics, elapsed time, calendar date), inspection checklists and PM routes. The application is fully integrated to distributed control systems, such as the Foxboro® I/A Series® System or the Wonderware® System Platform® application, to support the automated downloading of real-time operating statistics from the plant floor. The Preventive Maintenance function helps users manage maintenance in a proactive and planned manner, rather than treating maintenance as reactive or repair work.

### Reliability Analysis

The Avantis.PRO Enterprise Asset Management product builds a detailed history of equipment information based on day to day maintenance activities. Failure history, including symptoms, the cause of failure and action taken can be easily reviewed and analysed. In addition, indicators such as mean-time-between-failure and mean-time-to-repair reporting are available to determine proper fine-tuning of equipment maintenance requirements.

### Responsive to Operating Conditions

Seamless integration with the plant floor enables Avantis.PRO Enterprise Asset Management to take account of current operating conditions, and respond to warnings and alarms raised by monitoring systems in the production environment. Changing conditions that may impact the ability of production to deliver can be caught early, and dealt with through preventive and predictive maintenance routines that have much less impact on operations than unplanned emergency downtime.





## MRO Inventory

MRO Inventory addresses the main challenges of maintenance repair and operations, enabling the control of a large number of unique and low-unit value items. The system automates the reorder process by recognising calculated safety stock levels, replenishment lead times and sophisticated "available-to-promise" logic based on expected receipts (open purchase orders) and issues. The ability to establish multiple storerooms and locations, as well as flexible categorisation capabilities, and allows the user-defined grouping of items for searching, analysing and reporting purposes. The inventory module also provides the ability to uniquely identify and track repairable items and critical parts through serialisation.

## Procurement

The main objective of the procurement function in a maintenance environment is to minimise the cost of buying high volumes of MRO inventory items, and to ensure that parts are available when needed. Avantis.PRO Enterprise Asset Management focuses on fully automating the entire procurement process, including requisitions, purchase orders, expediting, receiving, quotations and contract and invoice matching. Extensive analysis capabilities are available to streamline the procurement process and allow more time for the procurement professional to add value in contract negotiation and vendor relationship management.

## Approval and EAM Workflow

Approval routing relies on the same engine as the Avantis.PRO Enterprise Asset Management cabinet functionality, thus providing the customer with unlimited flexibility on selection and routing rules. Approval routes are defined by the user, and can be based on both financial and functional rules. Approvals are electronically performed through an approval Inbox or via your standard email system, thus enabling off-line approvals to be performed at your convenience. Approved documents can be automatically processed to their next stage via workflow: for example, an approved requisition may be automatically ordered. The approval and workflow capabilities enable a considerable reduction in administrative workload over the long term, and provide enhanced flexibility to ensure auditable decision making.

## Successful, Proven Implementations with InRIM

Our guaranteed implementation approach ensures that you can quickly utilise the Avantis product offerings to maximise your return on assets and maintain your competitive edge. The Industrial Rapid Implementation Methodology (InRIM™) is a structured, multi-component methodology that ensures risk-free implementations without compromising the ongoing evolution and continued growth of its use. The InRIM approach is truly unique, in that it is based on industry standard best practices and offers a repeatable structure that can more predictably achieve your organisational objectives. InRIM and our systems methodologies will help you to put in place solutions to capitalise on your investment in developing a coherent asset strategy in line with ISO 55000.



### Avantis Geographic Information System (GIS) Link

Avantis GIS Link visually combines asset and maintenance related data with geographic and geospatial information by leveraging ESRI and other GeoJSON data platforms. It allows you to show the locations of work requests, work orders, preventative maintenance work (PM), and assets on a map. This functionality, combined with information layers from ESRI, allows a planner to logically group and dispatch maintenance activities. Linking asset information to geographical locations empowers end users to view work history and PM program information in the GIS system, or GIS information from within Avantis.

Many maintenance activities are transactional in nature and therefore, location data for transactional activities is not stored in the GIS. Avantis GIS link combines information from the GIS and Enterprise Asset Management system to provide maintenance focused work space. Avantis GIS link also provides powerful linear asset functionality and incorporates linear features and characteristics for optimum management.

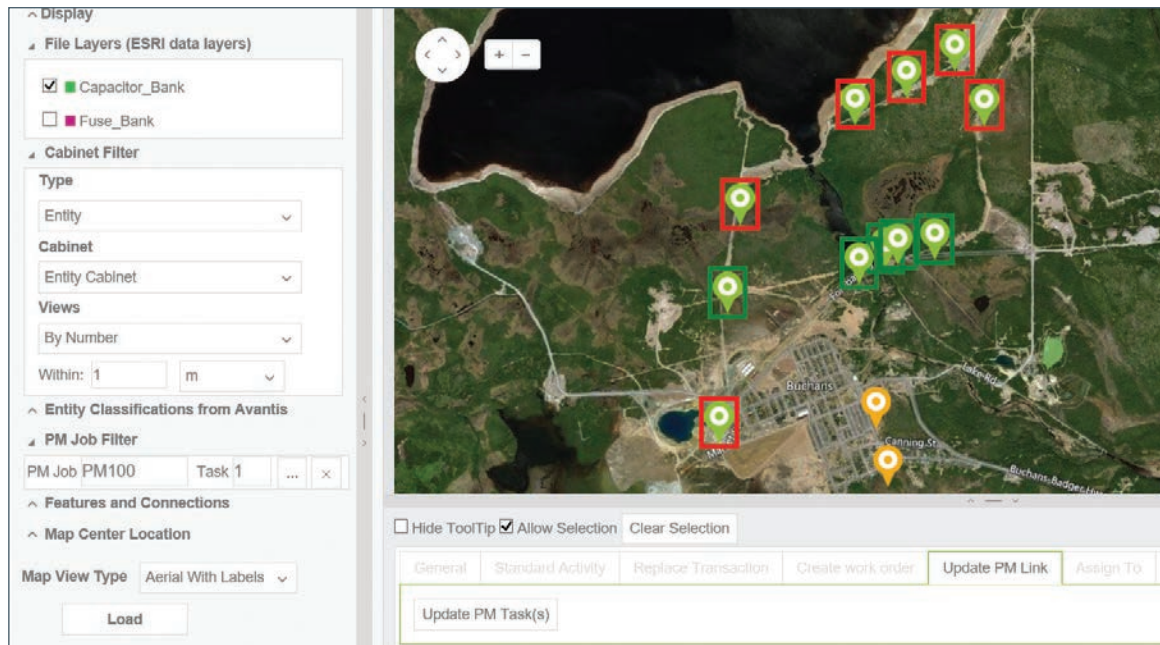
Avantis GIS Link is a role based application. The solution provides functions for super users, such as planners and schedulers, as well as a fully integrated mobile platform for field crews to execute maintenance activities. Both work management and GIS functionality is available on the mobile platform, including Store and Forward capabilities when the device is outside network connectivity. The GIS mobile platform is both device and operating system independent providing complete flexibility for your technology standards.

### Modern, Empowering Web Based Technology

Avantis.PRO Enterprise Asset Management web based EAM software, built using HTML5 technology, makes it easier to use, implement, maintain and generally easier to produce results by empowering all users to do their work anywhere, using any device. Web-based software allows management and employees to stay connected with unprecedented ease-of-use and accessibility from any internet connected device.

The flexible Cabinet and Designer, Forms Designer and Dashboard features are completely customisable and simplified allowing for customers to personalise the user experience to meet their business needs.





### Flexible Cabinet and Designer

- Design cabinets for user specific needs
- On the fly sorting, filtering and manipulating of data allows users to view work in a manner that is more meaningful
- Cabinet layouts can be saved for future use

### Flexible Forms Designer

- Flexible way to design the user interface forms to be fit for purpose
- Security profiles can limit forms available to users (short form for general users, long form for planners)
- Field level security

### Flexible Management Dashboards

- Design dashboards for snapshots of your equipment
- Highly flexible tool which enables all levels of the organisation to view summary and detailed information in an intuitive, visual manner
- Dashboards are accessible inside or outside your firewall

AVEVA Worldwide Offices | [www.aveva.com/offices](http://www.aveva.com/offices)

AVEVA believes the information in this publication is correct as of its publication date. As part of continued product development, such information is subject to change without prior notice and is related to the current software release. AVEVA is not responsible for any inadvertent errors. All product names mentioned are the trademarks of their respective holders.

© 2019 AVEVA Group plc and its subsidiaries. All rights reserved.