

HxGN EAM

Industry-Leading Asset Management Software to Extend Asset Lifecycles and Improve Productivity





Pressure to get greater efficiency from existing assets is continually increasing for organizations of all sizes and industries. For most organizations, achieving this requires a strategic enterprise asset management (EAM) system that can help maximize uptime, reduce costs and increase the reliability of assets. HxGN EAM is just the enterprise asset management system to do it.

HxGN EAM addresses these issues head-on with industry-specific capabilities that are easily scalable and highly configurable, yet can fulfill most of your users' needs straight out of the box. From asset structure and work orders to mobile and GIS capabilities, the solution provides you with all of the information you need, as you need it. HxGN EAM empowers you to make better, more strategic decisions that extend asset life, increase safety and improve profitability.

Built upon more than 30 years of experience and continuous innovation, HxGN EAM gives you all the tools you need to help solve your critical asset performance challenges. HxGN EAM is a strategic, industry-leading asset management solution that empowers you to increase the efficiency of your assets — today and tomorrow.

HxGN EAM Core Modules

HxGN EAM is designed to support the specialized requirements of your organization. Additionally, it is built on the Amazon Web Services® (AWS) cloud platform. This means you get extremely reliable uptime and the flexibility to handle elastic demand; additional computing power is there, whenever it's needed. The cloud-based platform's built-in scalability also means that the solution is designed to easily grow with your organization. We also have the ability to provide EAM on-premise.

HxGN EAM's core capabilities include:

Alert Management — Automatically monitor the HxGN EAM database for specific data and send emails or create work orders based on the analysis of that data. Alerts run at a predefined frequency, so they're ideal for anything that doesn't need immediate action.

Asset Management — Record, maintain, structure and standardize asset information. Capture the identity, configuration and structure of physical assets, their complete technical and commercial configurations and current position (either by location, functional position or tag), as well as prior locations and maintenance history.

Includes: asset depreciation, structure and bill
of materials, descriptive history and total cost of
ownership information, warranties and claims,
dashboards and linear assets, linear references,
failure analysis and documents providing full
visibility along the asset's lifecycle



Asset Management Services — Track all costs incurred for services delivered to customers, including work order costs, costs for fuel consumption, equipment usage, rent or lease and utility charges. Automatically include costs on periodically generated invoices.

 Includes: customer contracts, reservations, contract templates, adjustments, customers and customer invoices Asset Performance Management (APM) — Utilize a framework that enables your administrators to make use of physical assets to realize business-specific goals. You can employ multiple asset performance management strategies to maximize profit and reduce business risk factors.

• **Includes:** decay curve, asset performance score, service life, risk rating, criticality rating, condition rating and reliability

Budget Management — Automate the budget creation process and the subsequent capture, supervision, control and analysis of expenditures associated with maintenance work. Calculate a variety of financial and performance indicators that serve as input to critical enterprise performance measures.

 Includes: budget organization, expenditure and position identification; capital planning requests and general (GL) accounts

Calibration — Track calibration data for equipment categories, assets, systems and positions. Define test-point data and associate test-point sets with work orders and preventive maintenance work orders. This can be done through mobile and desktop.

Compatible Units — Build a template for estimation, quotation, approval and work order generation for commercial projects. Quickly create an estimated cost of a project to apply to work orders for execution based on the estimate. Create a library of repeatable tasks, materials and services.

 Includes: templates for labor, parts, tools, services, project quotation, estimation and work order generation

Electronic Records and Signatures — Create electronic records (snapshots) of events that occur in the database which require signatures. Through version control and audit capability, you can track insertions, updates or deletions of every attribute for almost every table in HxGN EAM, as well as all comments per entity.

Energy Performance — Set baselines, monitor and compare the energy performance of your assets against standards, such as Energy Star, ASHRAE 90.1, LEED and ISO 14001. Collect utility bills to monitor anomalies.

Fleet Management — Process warranty claims, manage tires and fuel and improve vehicle performance through preventive maintenance that increases productivity and cost-per-mile savings. With the Vehicle Maintenance Reporting System (VMRS), all code key values are included in the HxGN EAM database.

Inspection Management — Simplify the formation of inspection routes, specific measurement points on each asset, aspects to be measured and the collation of results. Link with asset management and work management modules for the listing and creation of work orders.

 Includes: inspection planning and organization, inspection point scheduling, classification and results, and checklists

Intelligent Nonconformity Tracking — Quickly identify potential issues that can be tracked and assessed automatically with your maintenance schedules over time and then assign a level of severity or risk based on a preset nonconformity index.

• Includes: incident management of an event such as an accident, creating detailed documentation (search by severity, intensity and importance)

Materials Management — Determine the correct stock levels to provide an acceptable service level of parts and supplies to meet anticipated demand for maintenance. Minimize the working capital invested in stocked parts and supplies. Automatically generate requisitions and purchase orders based on low stock levels, purchase requisitioning, goods receipts and returns, parts repair and record-keeping.

 Includes: materials organization, stock replenishment, store issues and returns; recording stock-take; goods receipt and return; purchaseorder tracking; repairable spares, material analysis, parts condition, inspections, failures and warranties, and product category management **Procurement Management** — Manage every aspect of the purchasing cycle — from requisition creation, approvals, supplier selection, purchase order placement and goods receipt through invoice matching. Ensure the selection of qualified suppliers and obtain the best price and delivery terms.

 Includes: purchase requisition generation, requests for quotations, purchase orders, invoice vouchers, contracts and receipts

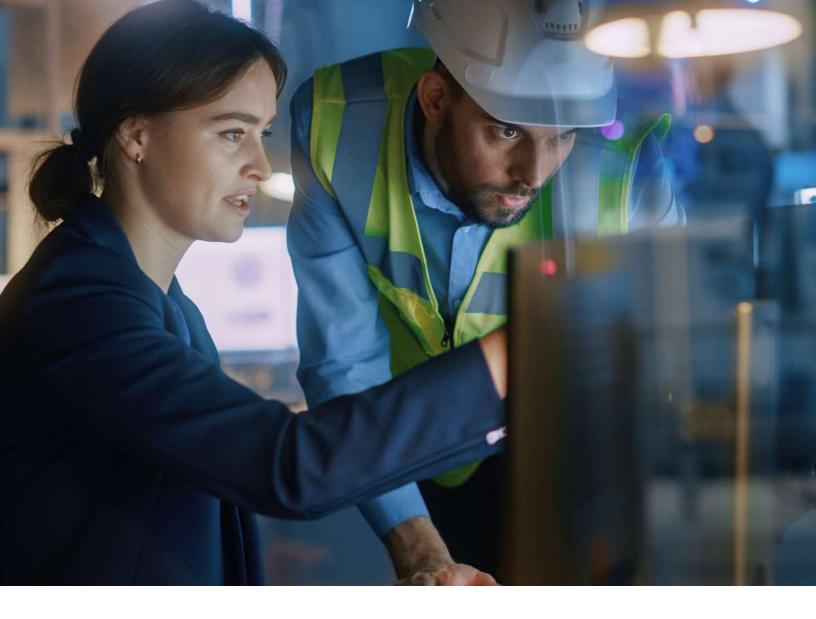
Project Management — Convert those capital planning requests into projects to execute against — from initial budget and timescale planning to completion of the final work. Facilitate comparison of actual status and progress of work, resource usage and costs against a project plan.

 Includes: project planning and organization; project budgeting, scheduling and execution, and Microsoft Project Interface

Reliability, Planning and Analysis (RPA) — Create reliability rankings with associated reliability decision trees, which are used as input on user-defined formulas that yield a numerical value. Create condition-score calculations, condition-decay protocols and risk-and-criticality calculations. Determine the reliability ranking score associated to a reliability ranking index. In addition, use Weibull, LaPlace and Crow-AMSAA formulas to predict potential failures.

• **Includes:** auditing of an event, such as an accident; creating detailed documentation, search by severity, intensity, size and importance





Reports — Utilize over 250 pre-built reports that support every module within HxGN EAM, from administration and assets to budgeting and inspections.

• Includes: work order reporting, assets inventory list, equipment details, mean time between failures, work order cost per equipment, estimated versus actual labor hours, purchasing reports and inventory reports

Safety Management — Identify and control all hazardous situations, materials and activities to protect people and the environment. Comply with health, safety and environmental (HSE) regulations.

 Includes: hazards, precautions, safety, isolation points, lock out/tag out, lockout boxes, permit to work setup, permit to work and sign-offs

Work Management — Manage, plan, monitor and approve work, as well as the necessary resources to complete that work. Create standard, regular and corrective work,

project work, periodic and non-periodic maintenance, and inspection follow-up work orders and schedules.

Define work information such as supervisors, permits, qualifications, employees, shifts, tools, tools and dynamic checklists.

• Includes: work order generation and scheduling; work organization, scheduling and completion; human resources management, periodic and non-periodic maintenance; call center and service request portal; deferred maintenance; crews; routes; multi-asset work orders; maintenance patterns and campaigns; reliability; revision control; case management and reservations calendar

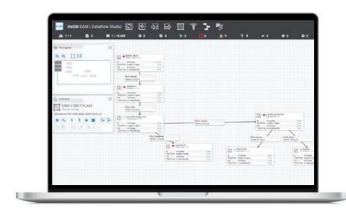
Workflow Approvals — Provides an embedded visual workflow approval capability that helps manage work orders, case management, requisitions and purchase orders. With this module, administrators can create an approval workflow setup record that systematically routes records within HxGN EAM to specific users or groups for review.

Advanced Add-On Modules

HxGN EAM's advanced add-on modules include:

Advanced Reporting Author — Maximize the data gathered by HxGN EAM into real-time reporting. Users can choose from hundreds of predefined reports or easily build their own custom versions to further analyze the data.

Databridge Pro — Powered by Apache NiFi, a leading open-source data flow automation platform, Databridge Pro provides enhanced data integration capabilities by introducing new features for configuring data pipelines, managing endpoint connections and providing better visibility for efficient troubleshooting and debugging. Available for HxGN EAM SaaS customers, it supports BOD, RESTful API, oData and other interface contracts.



Geographic Information System (GIS) interface —

Leverage HxGN EAM's intuitive interface and seamless GIS integration to visualize the assets and work along a map. Access GIS attributes and HxGN EAM asset attributes through one screen. Add/modify GIS data through the mobile application. You can also streamline workflows on widely dispersed equipment and create a consolidated, easy-to-access view of asset location and history.

OpenBIM — Create and manage asset data with an intelligent, 3D-model-based, process building information modeling (BIM) tool. BIM gives architecture, engineering and construction professionals data access and tools that can help maintenance to understand how assets are connected, where they are located to help visualize assets and work along a 3D model.

OpenCAD — Access and mark-up drawings within HxGN EAM. Calculate floor space using predefined industry standards. Save time by building your asset registry and creating assets in HxGN EAM directly from drawings. Visualize workspaces, permits, any facility or plant and assets work across the space.





Requestor — Easily support an increase in the number of users submitting work requests, equipment reservations and purchase requests, without significantly increasing your financial investment. The contractor portal is also available for mobile and desktop use.

Tech Studio

Streamline and simplify the decision-making processes of Activity Dispatch and Asset Investment Planning (AIP), tools supported through HxGN EAM Constraint Optimizer, by leveraging this problem-solving engine. Utilize your unique business data to drive decisions and remove the guesswork to produce efficient and effective results through Activity Dispatch, AIP capability and Python studio.

Activity Dispatch — Automate the assignment of work orders and activities based on business requirements, desired outcomes and constraints. You'll be able to streamline the management of large numbers of field employees across wide geographic locations by ordering and ranking dispatch plans based on specific priorities, staff skills, crew availability and worker proximity to their assignments. Scheduling, which used to take hours, now takes only minutes.

Asset Investment Planning — Generate long-term investment action plans for future periods based on business funding, risks, conditions and asset interventions.

Put your data to work and simplify the decision process by comparing multiple what-if scenarios to see the impacts and trade-offs of various planning elements.

Give your teams the confidence to efficiently create and communicate these investment plans, knowing the data backs them up.

Python Framework — Powered by JupyterLab, the industry standard for writing Python scripts, Python Framework provides customers with Python Studio, a streamlined user interface, for writing, managing and executing Python scripts. Python Framework features a robust infrastructure for seamless script execution and publishing, along with 20+out of the box templates aimed at lowering the technical barrier for users of all skill levels to leverage the power of Python.

• **Examples:** machine learning, condition monitoring, task automation, reporting and visualizations



Benefits

Customers have seen these improvements with HxGN EAM:

Up to a **50%** reduction in maintenance overtime, labor and contractor costs

20% reduction in production downtime

50% increase in warranty cost recovery

30% reduction in inventory levels

20% reduction in inventory carrying costs

10% reduction in materials costs

50% reduction in purchasing process costs

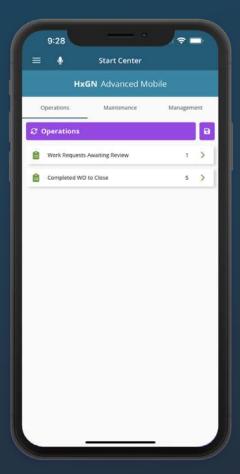
20% improvement in labor productivity

HxGN EAM Mobile Modules

HxGN EAM Mobile modules include:

HxGN EAM Mobile — Enable workers to harness HxGN EAM's functionality on a powerful mobile platform. Access, capture and manage information, either online or offline, directly from the job site or service location. This results in higher productivity and more effective decision-making. HxGN EAM Mobile is licensed by device to support shared devices within a facility or crew.

• Includes: work orders, work requests, meter readings, equipment, checklists, physical inventory, reports, case management, asset hierarchy and equipment inspections



HxGN EAM Mobile Requestor — The Mobile Requestor is ideal for users that have a need to periodically create requests or for contractors to see work that's been assigned to them. Users can now access the Mobile Requestor functionalities from HxGN EAM's Digital Work platform.

 Includes: work requests, parts requisitions, reservation requests, operator checklist and the Contractor Portal

HxGN EAM Advanced Mobile — Take advantage of HxGN EAM's most powerful, mobile-based EAM product. Extend user capabilities to more EAM modules and functionality. HxGN EAM Advanced Mobile adds to the existing capabilities of EAM Mobile and Mobile Requestor, and is available via the HxGN EAM Digital Work mobile app.

 Includes: capability, work orders, work requests, permit to work, equipment, physical inventory, notebook, operator checklist, parts, purchase order receipts, asset inventory and requestions

A Competitive Advantage

HxGN EAM allows you to gain a source of greater business efficiency with the industry-specific capabilities you need to transform understanding into action. Improving your asset performance allows you to reduce costs, increase profitability and reduce project risk. With HxGN EAM, you can turn your organization's asset management into a competitive advantage.

HxGN EAM 12.1 Release Highlights



HxGN EAM Databridge Pro

Effortless data integration for streamlined data pipelines, real-time insights and complete control in one solution.



Approval Workflows

Embedded visual workflow approval capability to manage work orders, case management, requisitions and purchase orders.



Dynamic Checklists

Checklist items that only appear when another checklist item is answered with a specific value.



Document Enhancements

Lock documents, view their version history and preview a document on the record view.



Mobile Updates

NFC scanning capabilities for HxGN EAM Digital Work, updated UI for Mobile Offline and more.



Additional Enhancements

New UI themes, enhanced PM Schedules, custom URL widgets, context-sensitive help, ArcGIS support updates and more.

To learn more, visit hexagon.com/products/enterprise-asset-management



About Hexagon

Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Asset Lifecycle Intelligence division helps clients design, construct, and operate more profitable, safe, and sustainable industrial facilities. We empower customers to unlock data, accelerate industrial project modernization and digital maturity, increase productivity, and move the sustainability needle.

Our technologies help produce actionable insights that enable better decision-making and intelligence across the asset lifecycle of industrial projects, leading to improvements in safety, quality, efficiency, and productivity, which contribute to Economic and Environmental Sustainability.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.5bn USD. Learn more at hexagon.com and follow us @HexagonAB.

