

# Better manage your linear assets with IBM Maximo Linear Asset Manager.



## Highlights

- Manage continuous assets with dynamic segmentation
- Automate asset lifecycle management in complex operational environments
- Better manage compliance reporting efforts
- Evaluate operational status more accurately
- Help reduce costs and enable proactive maintenance planning

For asset intensive and highly regulated industries such as railway, roadway, oil and gas, and utilities, using a top/down or hierarchical approach to manage linear assets is a difficult and complex process. The critical infrastructure in these industries requires a different view and approach than what is typically supported by most asset management systems. Unlike the assets found in a facility, plant or fleet, linear assets have unique requirements that demand a unique asset management approach. This approach is called continuous or linear asset management.

IBM now offers a new method for managing linear assets within these organizations. IBM Maximo® Linear Asset Manager extends the capabilities of IBM Maximo Asset Management, allowing organizations to better execute operational excellence plans and supporting their efforts to achieve increased asset availability.

IBM Maximo Linear Asset Manager helps manage all linear asset types. Examples include:

- Railways—tracks, switches, frogs, crossovers, signals
- Roads—lanes, bridges, tunnels, variable message signs (VMS), traffic signals
- Pipelines—pipes, valves, pumps, pipeline inspection gauges
- Power lines—electric transmission and distribution systems, substations, towers and poles

### Linear asset management in action

IBM Maximo Linear Asset Manager has applicability in a variety of linear asset-oriented industries. The following examples show how Maximo Linear Asset Manager can be used in roadway, railway, electric and gas, water and wastewater, chemicals and petroleum, and communications industries.

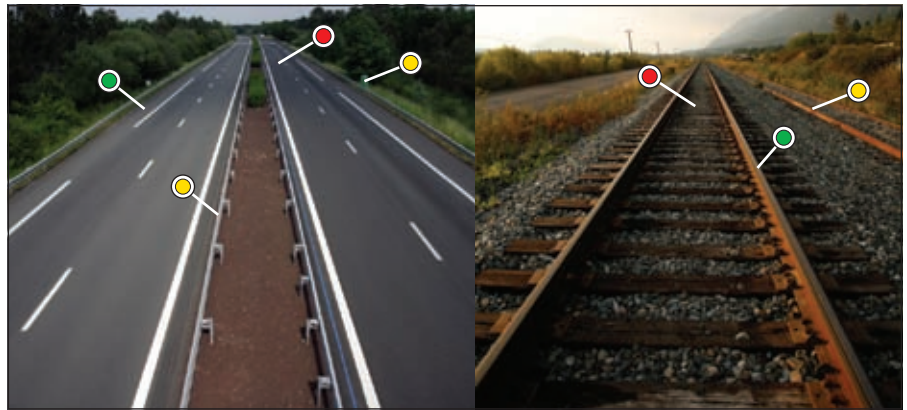
## Roadway

Whether managing roads for a city or an entire state, for a public road or private tollway, roadway asset infrastructure is the very definition of linear. Thousands of miles of roads, sidewalks and guard rails demand periodic repair and ongoing maintenance. Crews are constantly at work to make repairs or perform construction projects to resolve problems and improve the infrastructure.

Managing roadways as a continuous asset requires dynamic segmentation, giving crews the ability to identify work requests by mile or kilometer marker, lane, direction, offset and height, as well as to identify bridges or tunnels. This is very difficult if not impossible to do with the traditional, hierarchical asset view available in standard enterprise asset management applications. By providing tools to send crews to the right location with the right material, linear asset management with Maximo Linear Asset Manager can help organizations increase productivity.

Managing assets with Maximo Linear Asset Manager can also support an organization's efforts to manage regulations such as Governmental Accounting Standards Board (GASB) 34, budget more accurately for repairs and projects, and improve aging infrastructure.

## Managing roadways and railways with IBM Maximo Linear Asset Manager



*Managing roadways and railways with IBM Maximo Linear Asset Manager enables dynamic segmentation, giving crews the ability to identify work requests by mile or kilometer marker, lane, direction, offset and height, as well as to identify bridges or tunnels.*

## Railway

Organizations maintaining rail infrastructure require routine monitoring of track conditions. Inspectors will often physically walk the track once or twice per week to identify problems and conditions. Any conditions or problems are identified, then scheduled to be carried out by crews that execute repairs or complete construction projects. Railway infrastructure maintenance is critical for safe and reliable operations, and the cost of rail infrastructure maintenance can be 20 to 30 percent of a railroad's operating budget.

Managing railway assets with Maximo Linear Asset Manager provides a holistic view of the asset infrastructure as a continuous asset with dynamic segmentation, including views with mile or chain markers, track number, offset, switches, frogs/crossings and signals. Conditions identified in the field can be more quickly shared with operations and maintenance centers so they can be resolved more quickly by repair crews.

Maximo Linear Asset Manager also allows organizations to identify all the work in a given area, so crews can consolidate repair efforts while the track is out of service.

### **Utilities, oil and gas, and communications**

For electric utility, telecommunications and pipeline industries, service assurance is key. For many commercial organizations, any interruption in service directly impacts the bottom line, as well as their customers' perception of service. Organizations in these industries can use Maximo Linear Asset Manager to better manage their asset infrastructure as a continuous asset with dynamic segmentation, providing views of poles, pipe segments, direction, routers, customer addresses and more.

Managing assets with Maximo Linear Asset Manager also allows organizations in these industries to identify the current and historical problems reported in an area and determine immediate and longer term repair and replacement strategies, helping to reduce service interruption time and supporting efforts to improve customer satisfaction.

### **Rich functionality for competitive advantage**

IBM Maximo Linear Asset Manager offers rich functionality to help manage an organization's linear infrastructure, extending the capabilities of Maximo Asset Management. In addition to the deep functional modules provided in Maximo Asset Management, such as

asset, work, inventory, procurement and contract management, Maximo Linear Asset Manager provides many critical features, including:

**Asset/Feature/Relationship History** – Displays an asset's attributes, features or relationships at any point in its history.

### **Dynamic Gauge and Characteristic**

**Meters** – Allows a single meter to take readings at any point along a linear asset.

**Dynamic Segmentation** – Allows a linear asset to be segmented virtually based on attributes, features and work without physically impacting the underlying geometry.

**Linear Attributes** – Allows one attribute to be applied with different values to the same linear asset.

**Linear Asset Features** – Stores data on features—physical objects used to identify maintenance locations.

**Linear Assets Measurements** – Allows work to be located using either exact measures or reference points and offsets.

**Linear Self-Service Service Requests** – Adds measures to self-service service requests and resulting work orders for more effective incident management.

**Linear Work Progress** – Tracks progress against linear asset work orders.

**Linear Work Search** – Allows users to locate work by asset and by measure.

**Relationship-based Routes** – Provides user-defined relationships to identify route stops.

**User-defined relationships** – Enables user-defined relationships that extend beyond parent-child hierarchies.

### **A solution that can adapt to your organization**

No matter the industry or type of linear asset, Maximo Linear Asset Manager can help you manage the unique business processes related to asset and service management, enabling new levels of agility.

Built entirely on a Java™ Platform, Enterprise Edition (Java EE) component-based Internet architecture, Maximo software integrates with most existing business systems. Its service-oriented architecture (SOA) is truly open to better enable integration with enterprise resource planning (ERP), customer relationship management (CRM), performance monitoring, supply chain management (SCM), asset monitoring systems and many more applications.



## Part of a seamless asset management solution

Part of the IBM Tivoli® software portfolio, Maximo Linear Asset Manager can help organizations maintain assets more efficiently, extend asset life, reduce operating costs and more effectively monitor and manage their efforts to meet compliance requirements. Maximo Linear Asset Manager integrates seamlessly with other asset management and work management functions through IBM Maximo Asset Management. Maximo Linear Asset Manager and Maximo Asset Management comprise an adaptable asset management solution based on an industry-standard, service-oriented, Internet-ready architecture.

### For more information

To learn more about IBM Maximo Linear Asset Manager, please contact your IBM representative or IBM Business Partner, or visit [ibm.com/tivoli/maximo](http://ibm.com/tivoli/maximo)

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