

SAP Solution in Detail

SAP Enterprise Asset Management
SAP Linear Asset Management

SAP® LINEAR ASSET MANAGEMENT

A COMPREHENSIVE SOLUTION TO MANAGE LINEAR ASSETS

Companies with roads, rails, pipelines, electricity transmission lines, and other linear assets need to manage the entire lifecycle of these assets. They need to optimize the reliability, availability, maintainability, and safety of their networks and infrastructure. That's why you need a comprehensive, integrated solution that facilitates and connects linear asset management activities with the full gamut of enterprise processes and data. The SAP® Linear Asset Management application is designed to meet these requirements. Manage and optimize safety and performance together – across the infrastructure life-cycle, with all stakeholders involved.



THE BEST-RUN BUSINESSES RUN SAP™



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HIGH-PERFORMANCE MANAGEMENT OF THE ASSET INFRASTRUCTURE

CONNECT AND COORDINATE ASSET CONTROL AND ENTERPRISE PROCESSES

Your industry faces significant challenges in managing linear assets to optimize the reliability, availability, maintainability, and safety of the network and infrastructure. Unlike managing a manufacturing facility or maintaining a fleet, linear assets are not well served by a hierarchical management approach.

Until now, it took many stand-alone, stitched-together applications to support your efforts. A comprehensive solution that's truly integrated with your enterprise resource planning (ERP) applications – and focused on the specific needs of your industry – has not been an option. What you really need is a solution that facilitates and connects day-to-day and big-picture enterprise asset management activities with the full range of enterprise processes and data. In short, you need a solution to help build and manage continuous assets, identify maintenance locations by linear attributes, increase asset performance, and perform operational cost reporting at the right detail level.

Empower Business Users Across the Organization

From those who manage the asset itself to the people in finance, operations, marketing, and real estate, every-

one in the organization is involved in the network. But how can you integrate the management of linear assets with all these other enterprise processes?

The SAP® Linear Asset Management application is designed specifically to meet these requirements and challenges. For the first time, companies like yours can combine high-performance management of both safety and performance, across the infrastructure lifecycle, with all key stakeholders involved.

Natively integrated with your enterprise software solutions, SAP Linear Asset Management connects and coordinates asset management processes across the organization. The powerful application works with SAP and non-SAP software to help you define, construct, manage, and maintain your network. You can do all of the following:

- Manage and configure continuous assets
- Automate asset lifecycle management
- Improve compliance and risk management
- Evaluate operational status more accurately
- Reduce costs and enable proactive maintenance
- Improve decision support and resource management
- Integrate maintenance and financial management
- Monitor assets in real time
- Integrate diagnostic and monitoring applications through service-oriented architecture



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FACILITATE ALL ASPECTS OF LINEAR ASSET MANAGEMENT

A COMPLETE, INTEGRATED SOLUTION

SAP Linear Asset Management is a comprehensive solution that leverages and extends your present IT investments. The application enables three key areas of linear asset management – infrastructure management, asset management, and operations management – as follows.

Infrastructure managers can manage network assets to optimize the performance of the total system while making sure assets are available for operations.

Asset managers can deliver assets to the network at a level that is safe and reliable, while still meeting individual customer needs. They can maintain, renew, and enhance the network and plan for and deliver new infrastructure as the overall network and individual customers require.

Operations managers can control the overall service quality of the network, making sure the system operates safely and according to plan. They can schedule activities throughout the system including maintenance and dispatching; manage emergency response and incidents; and schedule investigation and performance reporting. They can also perform sophisticated analyses and manage the capacity of the network.

Optimal performance and safety means that your assets work harder for you and contribute to the bottom line. With tighter, more reliable scheduling and reduced downtime, you can increase revenues while adhering to the most

stringent safety standards. More accurate information and better communication and collaboration help improve customer responsiveness and satisfaction. Simply put, the SAP Linear Asset Management application enables you to realize new business value throughout the organization in the following ways:

- Improving core functions
- Encompassing maintenance and supply chain activities
- Facilitating collaboration and communication

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Improving Core Functions

SAP Linear Asset Management enables you to standardize and connect business processes throughout your organization. You can automate rote and transactional processes to improve efficiency and productivity. You can model complex assets – both linear and discrete – in one system of record. This lets you adopt changes to the network

faster, helping ensure data integrity across multiple asset types.

The solution enables you to improve classification systems with dynamic attribute definition. You can speed work-order reaction times and increase asset and purchasing efficiency by connecting and streamlining processes. With real-time access to up-to-date information, you can minimize the impact of asset upkeep on operations by enabling more efficient scheduling of maintenance work.

Encompassing Maintenance and Supply Chain Activities

SAP Linear Asset Management is built on an open service-oriented architecture, enabling you to adopt cutting-edge technology faster, respond to fluctuating business conditions and market opportunities, and gain a competitive advantage. The solution helps improve decision making throughout the organization by increasing data transparency and providing powerful analytics and real-time monitoring functionality – which also supports compliance with local and national regulatory requirements.

By applying methodologies such as reliability-centered maintenance, your team can concentrate on the activities most critical for preventing breakdowns. Thanks to improved information accuracy and trend analysis functionality, better predictive maintenance strategies can head off problems before they arise.

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The solution helps improve process efficiency and effectiveness across the supply chain by connecting disparate practices and optimizing supply chain strategies. You can increase the efficiency of supplier selection and bidding and purchase order processes, reduce delays in service and materials delivery, cut repair costs, lower inventory and safety stock levels, and identify warranty claim opportunities.

Facilitating Collaboration and Communication

The SAP Linear Asset Management application enables collaboration among departments, regional sites, and outside partners – across and beyond organizational boundaries. Connecting isolated silos of data and processes eliminates inefficient, error-prone activities such as manual information handover.

The open architecture eases the integration of third-party solutions, thereby reducing your total cost of ownership. Because it works together with SAP Business Suite software, other SAP solutions, and third-party software, the

application connects data and processes throughout the enterprise – key to resource management as well as information accuracy.

Greater transparency and process control lets you look at the big picture and plan ahead. You can reduce unnecessary expenses, such as crisis purchasing, typically incurred due to lack of preparation for unforeseen events. And you can ratchet up overall efficiency with better cost and budget management, work and resource forecasting, labor utilization, and inventory management. You can optimize asset performance with lifecycle cost reporting and management functionality.

UNLOCK NEW BUSINESS VALUE ACROSS THE ORGANIZATION

OPTIMIZE ASSET OPERATIONS AND MAINTENANCE

SAP Linear Asset Management helps you improve asset management effectiveness, efficiency, and strategy, thereby boosting asset reliability and return on investment. Now, you can manage infrastructure networks of continuous assets and make use of flexible dynamic segmentation functionality to visualize the network and assets configuration. You can define and control asset configuration, capacity, capability, and condition in one database, and automate asset lifecycle management in complex operational environments. The solution captures master data about critical network assets that helps cut asset downtime, and saves time that used to be spent searching multiple systems and files for documents such as maintenance procedures and drawings.

Now you can monitor assets in real time to optimize asset performance and safety. Advanced planning, scheduling, and assessment functionality helps you take a more proactive approach to asset management. At the same time, you have complete visibility into your network to find maintenance windows, make operational decisions, and speed up “wrench time” maintenance cycles. The software enables you to optimize maintenance plans, reduce maintenance and operating costs, and more accurately plan operational expenditures based on the real condition of your equipment. You can evaluate operational status more accurately, integrate maintenance and financial management processes, and reduce costs. This way, you get the most out of your infrastructure in the safest possible way.

Operation Account Assignment

Companies with linear assets have a particular need to understand the cost of individual maintenance tasks with a high level of granularity. Working in concert with SAP Linear Asset Management, the operation account assignment functionality within SAP Business Suite allows you to estimate, plan, and collect the cost of tasks performed during maintenance. As costs are totaled up for the entire job, this new functionality brings more flexibility to the processing of maintenance and service orders, work execution, period-end processing, and reporting activities.

Furthermore, with the new operation account assignment functionality within SAP Business Suite, you can capture detailed costs and aggregate them in categories that are not part of your overall business strategy. This enables you to meet the specific compliance requirements of external state and federal regulatory bodies.

Enabling a Best-Run Organization That Manages Linear Assets

SAP Linear Asset Management provides the tools you need to meet the unique and multifaceted challenges of managing infrastructure and networks. You can improve asset management effectiveness, efficiency, and strategy.

SAP Linear Asset Management facilitates the management of thousands of kilometers of rail tracks, pipelines, roads, transmission lines, and so forth as they pass through congested cities

SAP Linear Asset Management is built on an open service-oriented architecture, enabling you to adopt cutting-edge technology faster, respond to fluctuating business conditions and market opportunities, and gain competitive advantage. The solution helps improve decision making throughout the organization by increasing data transparency and providing powerful analytics and real-time monitoring functionality – which also supports compliance with local and national regulatory requirements.



and remote locations. With the application, you can manage dispersed assets with few or no obvious characteristics that distinguish one unit from another, other than their relative locations. The application enables you to account for uneven maintenance requirements and component wear distributed along the asset in nondiscrete locations. Furthermore, the application helps manage components beyond the linear asset itself – high-tech items such as signaling systems, instrumentation, complex structures such as bridges, pump stations, and substations. Sophisticated functionality addresses the interconnected nature of the infrastructure. For example, you can assess defect rates that change across the network infrastructure due to the variable effects of weather and the elements on different segments of the asset. This enables you to decrease defect rates and maintain operations. The application has the precision to provide reliable information to support operations and head off failures that can have wide-ranging and drastic effects on the overall system.

Your Business Benefits

At the end of the day, SAP Linear Asset Management enables you to manage asset performance and safety

together – because for your organization, these goals are inseparable. You can coordinate and connect the management of both safety and performance across the organization and the infrastructure lifecycle.

You can improve performance thanks to more reliable assets. You can boost efficiency and implement an effective overall maintenance strategy with improvements in advanced planning and scheduling processes. You can boost revenues with greater asset availability and improve customer satisfaction and responsiveness with accurate information and better communication. And you can increase the return on your valuable assets and free up cash for capital investments.

Finally, the operation account assignment functionality gives you better reporting and tighter control over costs, and allows you to accommodate external compliance demands.

Find Out More

To find out more about SAP Linear Asset Management and the operation account assignment functionality within SAP Business Suite, call your SAP representative or visit us online at www.sap.com.

Summary

The SAP® Linear Asset Management application is a comprehensive, integrated solution that facilitates and connects linear asset management activities with the full gamut of enterprise processes and data. Companies with roads, rails, pipelines, electricity transmission lines, and other linear assets can optimize the reliability, availability, maintainability, and safety of their networks and infrastructures.

Business Challenges

- Lack of a comprehensive linear asset management solution focused on the specific needs of impacted industries and integrated with enterprise resource planning (ERP) applications
- The need to manage linear assets that are not well served by a hierarchical management approach

Key Features

- **Infrastructure management** – Manage network assets to optimize the performance of the total system while making sure the assets are available for operations
- **Asset management** – Deliver assets at a safe and reliable level while meeting customer needs; maintain, renew, and enhance the network; plan for and deliver new infrastructure as network and customers require
- **Operations management** – Control network service quality; schedule activities including maintenance and dispatching; manage emergency response and incidents; and schedule investigation and performance reporting

Business Benefits

- **Increase operational efficiencies while adhering to the most stringent safety standards** with tighter, more reliable scheduling and reduced downtime
- **Improve customer responsiveness and satisfaction** with more accurate information and better communication and collaboration
- **Improve reporting and gain tighter control over costs** thanks to operation account assignment functionality
- **Strengthen performance** through more reliable assets
- **Boost efficiency and implement an effective overall maintenance strategy** with improvements in advanced planning and scheduling processes

For More Information

Call your SAP representative, or visit us online at www.sap.com.

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