

MindApps and Applications for MindSphere

Benefits

- Access the IoT platform optimized for industrial IoT applications
- Highly scalable, cost-effective cloud infrastructure based on Cloud Foundry, including integration of AWS native services
- · High security standards
- Easy data transfer into MindSphere using plug-and-play connectivity

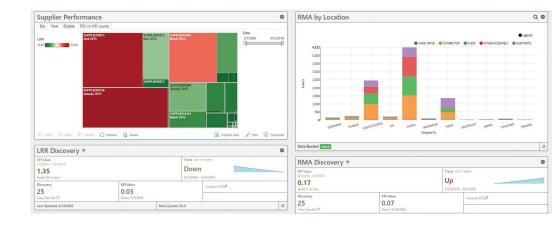
Unleash your IoT potential with MindApps

MindSphere MindApps and Applications for MindSphere from Partners create value from the Internet of Things (IoT) data from connected machines and assets. MindApps and Applications for MindSphere enable users to configure industrial assets, visualize analytics and explore insights from relevant data for analysis. MindApps are Siemens developed applications based on broad domain expertise across a wide range of industries. Applications for MindSphere are developed by partners or customers and

deployed for dedicated environments; or they can be offered to other customers in the MindSphere Store.

Optimize the entire value chain

Digitalization opens up new avenues of innovation, differentiation and revenue. Companies can now collect data from product design, prototype, manufacturing and the field. The challenge is deriving value from these data sources to obtain a competitive advantage. Companies must optimize their entire value-chain from design, engineering and manufacturing all the way through service. Many struggle with generating business context across the varied data sources and types.



MindApps and Applications for MindSphere

MindSphere is the cloud-based, open IoT operating system that lets you connect, collect and get context from your IoT data. Collect real-world data and connect it to the digital twin, and utilize the platform to develop applications to help discover what's important and what actions to take. Applications can be developed and tested in MindSphere for you and your end customer. In addition, you can open up new revenue streams and service models by deploying the application to a production environment. You can also leverage the MindSphere ecosystem to distribute your application to your customers and partners.

Value in data

Digitization, and the transformation of IoT data to productive business results, are core drivers of MindSphere. High-value, industry-based applications built on MindSphere deliver measurable results through digital services that are based on best-practice solutions. In addition, companies can leverage MindSphere to close the loop through product ideation, realization and utilization to seamlessly integrate operational data throughout the value chain – not only driving operational efficiency, but also comparing simulation and test results with real-world observations.

Open new revenue streams

IoT enables companies to offer new services to customers, which generates new revenue streams. Using connected devices, companies can better understand the customer experience and focus on product development appropriately. Companies can differentiate themselves by delivering products or digital services focused on customer feedback and actual product usage.

Manage MyMachines, a MindApp

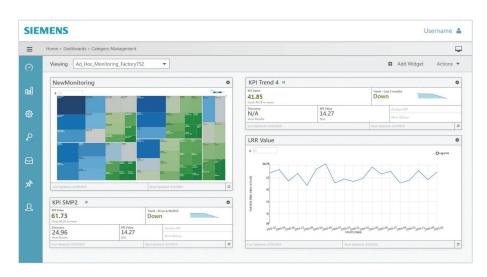
Manage MyMachines, from Siemens Motion Control, leverages data analytics, product and process expertise. Manage MyMachines reduces unplanned downtimes and increases efficiency of your machines. With Manage MyMachines, you can:

- Display and manage your machine fleet across multiple systems and physical locations
- Transform critical machine data into data-driven analytics
- Enable development of new digital offerings to end customers
- Instant and easy connection of SINUMERIK

Product Intelligence, a MindApp

Product Intelligence is used to automate insight from product performance data to create actionable intelligence. The MindApp combines data from product lifecycle management, enterprise resource planning, manufacturing execution systems, quality management systems, customer relationship management, IoT and other enterprise data sources into one unified secure data lake for analytics. Product Intelligence creates context by classifying and linking product-related attributes into unique events through patented algorithms, enabling billions of events to be searched and analyzed in seconds. Product Intelligence features:

- Data Quality, which validates, rapidly cleans and purifies big data sources
- Performance Analytics that quickly identifies product issues disrupting the supply chain, manufacturing process or customer experience.
- Fast Contextual Search, which enables you to search all of your unified big data in seconds
- Advanced Data Visualization, which integrates Tableau® to enable users to create a variety of charts and graphs from layers of complex data sets.



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MindSphere Store and partner ecosystem

To address the broad scope and high complexity of digital transformation, Siemens has created a network of world-class partners built around MindSphere. These partnerships enable MindSphere to provide a holistic set of IoT solutions and services, precisely matching the specific requirements of our customers, whereas it provides partners numerous opportunities to build and operate digital offerings around MindSphere.

MindSphere

MindSphere is the cloud-based, open IoT operating system from Siemens that connects real things to the digital world, and enables powerful industry applications and digital services to drive business success. MindSphere's open Platform as a Service (PaaS) enables a rich partner ecosystem to develop and deliver new applications.

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