MindAccess
IoT Value Plan

Benefits
• Immediate access to MindSphere
• Quick configuration of MindConnect devices with no development required
• Immediate monitoring of assets
• High security standards
• Access to applications for MindSphere through the MindSphere Store
• Global Partner ecosystem ready to drive and support your IoT strategy

Enter MindSphere with MindAccess IoT Value Plan and unleash your digital potential

MindSphere is the operating system that lets you connect, collect and get context from Internet of Things (IoT) data. With MindSphere MindAccess IoT Value Plan, users can ingest and visualize immediate real-time data and analytic results in one centralized location with no development required. In addition, MindAccess is the user’s portal into the MindSphere Store, a marketplace for powerful industrial applications. By leveraging these applications, users gain revolutionary visibility into their product value chain and the confidence to make optimal business decisions.

Solving the IoT access challenge
Customers are incurring additional costs and decreased efficiency with time spent locally monitoring machines on multiple monitoring systems. MindSphere and MindAccess IoT Value Plan streamline your operations by providing a single view of asset data and analytics. By collecting, contextualizing and analyzing historical data into a centralized system, operators can more efficiently and effectively manage assets and facilities. Customers will have meaningful and secure access to their IoT data as the first crucial step on the IoT journey.

High-value, industry-based applications built on MindSphere and accessible via the MindSphere Store deliver measurable results from digital services that are based on best-practice solutions. In addition, companies 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.

With streamlined user access to consolidated data from disparate sources, companies can better understand the end-customer experience and focus on product development appropriately. Companies can differentiate themselves in the market by delivering products focused on customer feedback and actual product usage information.

Immediate access to MindSphere
MindAccess IoT Value Plan provides dedicated tenant access to ingest data and use common applications and is available in multiple offerings to suit your unique business requirements. Additional users, storage, agents and connected assets may be added as required. Users can configure users, agents, customers and assets, and may also store data.

Quick configuration of MindConnect devices
With MindAccess IoT Value Plan, users can connect Siemens and non-Siemens devices to MindSphere with no development required using the asset configuration tool. MindConnect Nano and
MindConnect IoT2040 devices can be configured as agents to send device data into a dedicated tenant for storage.

MindConnect APIs and MindConnect IoT Extension can be utilized to connect a wide range of devices to MindSphere. These powerful tools make it possible to connect devices communicating with varying protocols and begin visualizing data and manage the fleet in one location.

In addition, MindSphere facilitates data integration with existing enterprise systems and databases such as historian databases, enterprise resourcing planning (ERP), manufacturing execution system (MES) and supervisory control and data acquisition (SCADA) systems. By joining data streams from multiple sources into one centralized location, customers will have more insights across the entirety of their operations.

Immediate monitoring of assets
MindAccess IoT Value Plan includes Fleet Manager, which provides an overview of assets configured in MindSphere. Users can quickly search for all assets and focus on relevant issues based on user-defined parameters configured within Fleet Manager. In addition, users can configure rules to automatically monitor machines through rules and create follow-up requests like email notifications upon reaching a predefined state. Integrated into the Fleet Manager, these requests are displayed to the user in an intuitive way. The Visual Analyzer option further enhances data visualization and offers complex algorithmic functions.

A map view shows the geographic location of connected assets. In the detail view, users see the recorded data shown in different diagrams. Users can also define the time frame for which the data is displayed and drill down deep into their data.

The MindSphere Store and partner ecosystem
MindAccess IoT Value Plan enables access to the MindSphere Store and partner ecosystem. To address the broad scope and high complexity of digital transformation across all industries, MindSphere has established a network of world-class partnerships that enables MindSphere with a robust offering of IoT solutions and services with the flexibility to match the specific requirements of our customers. In addition, partners have numerous opportunities to build and operate their own digital offerings around MindSphere.

Partners can also use the MindSphere Store to gain access to various upgrades, including number of users, tenants, agents, connected assets and rules as well as additional options for dashboarding, workflow creation and rich reporting.

Solving real-world problems with IoT and MindAccess IoT Value Plan
The MindConnect Nano, along with the MindAccess IoT Value Plan, was chosen as the affordable, out-of-the-box connectivity solution for MindSphere by a soft drink producer with a large-scale production environment and broad range of products. The customer required a fast and flexible solution that required no development to accommodate rapid production changeover and provide global access of asset data.

The successful implementation and onboarding of 10 MindConnect Nano boxes enabled 150 motors from different locations to be quickly and securely connected to MindSphere. This allowed the customer to visualize and monitor data across global locations using Fleet Manager, a tool-based evaluation of critical condition events for further inspection and problem fixing at an earlier stage. Ultimately, the customer benefitted in increased asset uptime through accurate asset failure prediction, improvement of the manufacturing process, higher product quality and optimization of service productivity.
## MindAccess IoT Value Plan Offerings

<table>
<thead>
<tr>
<th>IoT Value Plan</th>
<th>S</th>
<th>M</th>
<th>L</th>
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</thead>
<tbody>
<tr>
<td>Number of users/Subtenants</td>
<td>50/10</td>
<td>150/40</td>
<td>500/80</td>
</tr>
<tr>
<td>Agents onboarded (MindConnect Elements or Lib)</td>
<td>10</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Assets included (types/instances)</td>
<td>5/50</td>
<td>10/250</td>
<td>50/1000</td>
</tr>
<tr>
<td>Data ingest rate(^1) (time series)</td>
<td>2 KB/s</td>
<td>10 KB/s</td>
<td>100 KB/s</td>
</tr>
<tr>
<td>Data storage time series (cold storage)</td>
<td>60 GB</td>
<td>300 GB</td>
<td>3 TB</td>
</tr>
<tr>
<td>Data ingest via MindConnect IoT Extension(^2), monthly</td>
<td>5 GB</td>
<td>5 GB</td>
<td>5 GB</td>
</tr>
<tr>
<td>File storage</td>
<td>50 GB</td>
<td>100 GB</td>
<td>500 GB</td>
</tr>
<tr>
<td>User Management</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Asset Management</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Productive Tenant</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Access to the MindSphere Store</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fleet Manager Basic including rules and events(^1)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

\(^1\) Limited use of rules and events; upgrade available.  
\(^2\) Part of overall data ingest.  
\(^3\) Based on number of assets, number of variables per asset, size per variable, read cycle interval and sending frequency; exemplary use case for M size: 200 assets with 10 variables each sending frequency 10s or 20 assets with 100 variables each sending frequency 10s, etc. (assumptions: 50 bytes per variable including overhead – float from MindConnect Nano/ IoT2040 or S7-FB, read cycle equals sending frequency).

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### 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.