

Insights Hub Add-ons

Product Sheet



Insights Hub Add-ons enhance Capability Packages according to your use case by adding capabilities on demand.

Prerequisites

Subscription	A valid subscription to an Insights Hub Capability Package (Essentials/Standard/Advanced) is required.
--------------	--

Asset Health & Maintenance

Description	Asset Health & Maintenance enables your maintenance team to transform your maintenance processes by making them more efficient. Lower maintenance costs and quickly detect and respond to anomalies before they become problems or downtime. It allows your maintenance team to: <ul style="list-style-type: none">• Merge insights from different condition monitoring systems.• Raise maintenance/service requests in your maintenance management system.• Link your maintenance management system with actual data of Insights Hub.• Perform a quick 360° root cause analysis of issues.
Subscription	Asset Health & Maintenance is included by default in Insights Hub Advanced Capability Packages and is available to subscribers of Insights Hub Standard Capability Packages.
Third-Party Terms	The Third-Party Terms for Asset Health & Service Maintenance are available in the application's OS bar.
Documentation	For further details about Asset Health & Maintenance please see the documentation available via the following link:

<https://documentation.mindsphere.io/MindSphere/apps/insights-hub-asset-health-and-maintenance/overview.html>

Business Intelligence

Description	<p>Business Intelligence enables you to visualize certain parts of customer content. Such visualizations can be combined into dashboards, which may be used to analyze the performance of connected assets. Your subscription includes 5 GB of storage volume to save your data sources and visualizations.</p> <p>It can be subscribed to in different types (Creator/ Explorer/ Viewer) of Authorized Users.</p> <p>A <i>Creator or Explorer</i> can access the main application, which is built on Tableau® web version, and the supplemental tool <i>Business Intelligence Data</i> from the Insights Hub Launchpad. <i>Business Intelligence Data</i> can be used to transform time series, Integrated Data Lake or Opcenter Intelligence OData queries into data sources, which can later be used to create visualizations with the main application. The main application further enables you to create or publish a workbook (i.e., a combination of visualizations and dashboards), modify an existing workbook or create subscriptions, alerts or comments on a published workbook.</p> <p>In addition to the above, a <i>Creator</i> can build a data source directly in the main application, primarily using the direct connection to the Opcenter Intelligence Manufacturing Data Warehouse. There is an additional User Interface in the main application to support this. The <i>Creator</i> can also pre-process data sources using the Tableau® prep functionality.</p> <p>A <i>Viewer</i> gets access to a subset of features and functionalities via the Business Intelligence application. A <i>Viewer</i> may interact with or export an existing visualization but may not use <i>Business Intelligence Data</i>.</p> <p>Your subscription includes 5 <i>Explorers</i>. Additional upgrade subscriptions to increase the number of <i>Explorers</i> or to subscribe as <i>Creator</i> or <i>Viewer</i> are available separately.</p>
Subscription	<p>Business Intelligence is available to subscribers of Insights Hub Essentials, Standard and Advanced Capability Packages.</p> <p>The base subscription to Business Intelligence includes 5 Explorer Users and 5 GB storage volume to save your data sources and visualizations. Additional upgrade subscriptions to increase the number of Explorers or to subscribe as a Creator or Viewer are available separately for additional fees.</p>
Third-Party Terms	<p>Third-Party Terms for the Business Intelligence main application and Business Intelligence Data are available in the application OS bar.</p>
Documentation	<p>For further details about Business Intelligence please see the documentation available via the following link:</p> <p>https://documentation.mindsphere.io/MindSphere/apps/distribution/Business-Intelligence.html.</p>

Cloud Foundry Hosting

Description	<p>We offer a managed runtime environment powered by Cloud Foundry to run your own applications. Cloud Foundry is a platform as a service (PaaS) providing a development and production environment within Insights Hub. Cloud Foundry Hosting enables you to create and host practically everything from simple cloud-based IoT dashboards to sophisticated enterprise applications.</p> <p>Your subscription to Cloud Foundry Hosting includes access to 2 so-called Cloud Foundry Orgs (one for your Production Environment and one for your Development Environment). Every Org provides a dedicated login to a Cloud Foundry environment that an individual or multiple collaborators can use. Each Cloud Foundry Org comes with 2 GB of RAM per default (can be upgraded for additional fees).</p> <p>Your subscription to Cloud Foundry Hosting allows you also to utilize any available size (e.g. XS or M) of Backing Services. The size relates to available memory, storage space and additional properties such as high availability. A usage-based fee will be charged depending on the size of Backing Services in use as set forth in the "Price List for Offerings with Usage-based Fees" available at https://plm.sw.siemens.com/en-US/insights-hub/resources/product-sheets/.</p> <p>Backing Services include any service which an application utilizes over the network as part of its normal operation. You can utilize Backing Services e.g. for storage, caching, messaging etc. Available service types are: ElasticSearch, LogMe, PostgreSQL, RabbitMQ, Redis.</p>
Subscription	Cloud Foundry is available to subscribers of Insights Hub Essentials, Standard and Advanced Capability Packages.
Documentation	For further details about Cloud Foundry Hosting please see the documentation available via the following link: https://documentation.mindsphere.io/MindSphere/paas/index.html .

Dashboard Designer

Description	<p>Dashboard Designer enables you to create simple & advanced Grafana based dashboards from IoT time series, semi-structured and unstructured data like e.g. files. It is accessible directly from the Launchpad. The following Grafana visualization panels are available, e.g. Bar Gauge, Clock, Dashboard List, Gauge, Graph, Heatmap, Pie Chart, Separator, Singles Table, Text. Additionally, the following third-party visualization plugins are available, e.g. Breadcrumb, ImageIt, CalHeatmap, SVG, Traffic Lights. Those visualization panels can be combined into dashboards.</p> <p>Dashboard Designer has two different types (Creator/ Viewer) of Authorized Users. An Authorized Creator User can create view, modify and delete existing dashboards. An Authorized Viewer User can view existing dashboards.</p>
Subscription	The base subscription to Dashboard Designer includes 5 Authorized Creator Users. Additional upgrade subscriptions to increase the number of Creators or to subscribe as a Viewer are available separately for additional fees.

	The Dashboard Designer base subscription is included by default in Insights Hub Standard and Advanced Capability Packages and is available to subscribers of Insights Hub Essentials Capability Packages.
Limitations	Please note that certain technical limitations may apply when creating dashboards by Authorized Creator Users. For more information, please refer to the document “Technical Limitations for Usage of Insights Hub and Industrial IoT Resources” at this link: https://plm.sw.siemens.com/en-US/insights-hub/resources/product-sheets/ . To clarify whether such technical limitations can be increased, please contact Insights Hub Support.
Third-Party Terms	Third-Party Terms for Dashboard Designer are available are available in the application’ s OS bar.
Documentation	For further details about Dashboard Designer please see the documentation via the following links: https://documentation.mindsphere.io/MindSphere/apps/dashboard-designer/introduction.html and https://documentation.mindsphere.io/MindSphere/apps/dashboard-designer-v10/introduction.html .

Edge Analytics

Description	<p>Edge Analytics allows you to collect high frequency data, pre-process raw data and use an analytic edge functionality to calculate your KPIs. These KPIs allow condition monitoring (e.g. vibration analysis) of your asset. Your subscription to Edge Analytics comprises (i) a subscription license to the Edge Analytics Engine software for use on your connectivity hardware in the field to collect data and perform edge analytics of the data to calculate KPIs and send the calculated KPIs to the Platform, and (ii) a subscription to the Edge Analytics that allows you to configure your data points and KPIs on your Account.</p> <p>The Edge Analytics Engine software will be made available for download and must only be used on supported connectivity hardware. The MindConnect Nano, MindConnect IoT2050 and MindConnect Software Agent from Siemens are currently supported connectivity hardware. For further information as to which connectivity hardware is currently or will be supported, please verify with your Insights Hub sales representative. To connect and process data, Data Points are needed. Data Points can be distributed among the devices such as MindConnect Nano or MindConnect Software Agent in the Environments of your Account.</p> <p>You can also use the trial mode for up to 5 external datapoints to explore and test the Edge Analytics functionalities within 7 days. After expiration, the Edge Analytics Engine needs to be restarted again.</p>
Subscription	<p>The base subscription to Edge Analytics including 5 Data Points is included by default in Insights Hub Standard and Advanced Capability Packages and is available to subscribers of Insights Hub Essentials Capability Packages.</p> <p>The number of Data Points can be increased for additional fees.</p>
Third-Party Terms	<p>Third-Party Terms for Edge Analytics are available within Industry Online Support via the following links:</p> <p>MindConnect IoT2050: https://support.industry.siemens.com/cs/ww/en/view/109813714</p> <p>MindConnect Nano: https://support.industry.siemens.com/cs/us/en/view/109745561</p> <p>MindConnect Software Agent: https://support.industry.siemens.com/cs/us/en/view/109809640</p> <p>Third-Party Terms for Edge Analytics are integrated into MindConnect firmware; therefore, the above-mentioned links will depend on the MindConnect products you are using.</p>
Documentation	<p>For further details about Edge Analytics please see the documentation available via the following link:</p> <p>https://documentation.mindsphere.io/MindSphere/apps/insights-hub-edge-analytics/introduction.html.</p>

Energy Optimizer

Description	<p>Energy Optimizer helps production managers and process engineers identify energy resource savings across production processes. Whereas Energy Management gives transparency on past consumption, the Energy Optimizer application calculates what your minimum consumption should be and sends alerts when this will be exceeded. This gives operators early warning so that they can take action to control their process and reduce resource consumption costs.</p> <p>Key capabilities of the solution include:</p> <ul style="list-style-type: none"> • Calculation of your optimal consumption and your Energy Efficiency for multiple energy resources across multiple product lines. • Categorizing resource consumption into each process phase and equipment status to identify where losses occur. • Analysis of the distribution of energy consumption on your process to determine an accurate level for outlier detection. • Identification of an energy benchmark to use as a target for your production assets. • Configuration of alerts to notify users when this energy target is missed or at risk.
Subscription	<p>The base subscription to Energy Optimizer includes 3 deployed models; 10 energy consumer assets and 50 named users. Additional models, assets and users can be upgraded for additional fees.</p> <p>The base subscription to Energy Optimizer is available as an add-on to subscribers of Insights Hub Standard or Advanced Capability Packages.</p>
Third-Party Terms	Third-Party Terms for Energy Optimizer are available in the application's OS bar.
Documentation	For further details about Energy Optimizer please see the documentation available via the following link: https://documentation.mindsphere.io/MindSphere/apps/Insights-hub-energyoptimizer/introduction.html

Intralogistics

Description	<p>Intralogistics helps you to optimize your intralogistics processes through the calculation of relevant parameters and to monitor your material channel health. The application enables you to reduce material-related downtimes and to better understand your internal material supply.</p> <p>Intralogistics offers the following core capabilities:</p> <ul style="list-style-type: none"> • Calculation and visualization of material replenishment and consumption times on material channels to gain insights into your production process. • Automatic detection and issue generation using different scenarios to increase the uptime of the material supply. The following issues are automatically tracked: <ul style="list-style-type: none"> ○ Empty material channels. ○ Material channels below the minimum fill level. ○ Material out of position. ○ Consumption time is quicker than the replenishment time.
-------------	---

	<ul style="list-style-type: none"> Automatic exclusion of useless datapoints, e.g., replenishment or consumption times over the weekends. Overview dashboard to provide the current factory dashboard.
Subscription	<p>Intralogistics is available to subscribers of Insights Hub Essentials, Standard and Advanced Capability Packages.</p> <p>The base subscription to Intralogistics includes 50 Users and 100 Material Channels, for which the replenishment and consumption times can be calculated, and the issues being tracked. Material Channel is defined as logical group of sensors which can indicate if a position in the material channel is filled or empty. Additional upgrade subscriptions to increase the number of Users or Material Channels are available separately for additional fees.</p>
Third-Party Terms	The Third-Party Terms for Intralogistics are available in the application's OS bar.
Documentation	<p>For further details about Intralogistics please see the documentation available via the following link:</p> <p>https://documentation.mindsphere.io/MindSphere/apps/insights-hub-intralogistics/introduction.html</p>

MindConnect Advanced Driver Extension

Description	MindConnect Advanced Driver Extension is an optional extension to the MindConnect Software Agent and MindConnect IoT2050. A subscription to this extension allows you to use additional adapters within the supported hardware devices and to enable various additional supported field protocols such as S7+, IEC61850, or SINUMERIK PL. Each license enables one new adapter (e.g. S7+) within one MindConnect Device. This extension is available for MindConnect Software Agent and MindConnect IoT2050.
Subscription	<p>MindConnect Advanced Driver Extension is available to subscribers of Insights Hub Essentials, Standard and Advanced Capability Packages.</p> <p>With your subscription to MindConnect Advanced Driver Extension, we grant you the non-transferable, non-sublicensable, and revocable right to use, and permit Third Parties to use, the extension for using one adapter within one supported hardware device during the Subscription Term.</p>
Documentation	<p>For further details about MindConnect Advanced Driver Extension see the documentation available via the following link:</p> <p>https://documentation.mindsphere.io/resources/html/getting-connected/en-US/146436770955.html</p>

OEE

Description	<p>OEE allows you to calculate Overall Equipment Effectiveness (OEE) and additional KPIs for lines and machines, in order to better understand the efficiency of underlying production processes and to be able to continuously improve. Additionally, it also helps the user to track the success of measures taken.</p> <p>OEE offers you the following core capabilities:</p>
-------------	--

	<ul style="list-style-type: none"> • Calculate OEE, Mean Time To Repair (MTTR), Mean Time Between Failure (MTBF) and further relevant KPIs for machines and lines. • Filter capabilities for timeframe, products, and orders. • Support of single- and/or multiproduct production systems. • Reason tree modeling and ability to change recorded downtime reasons afterwards. • Customization of OEE formulas for OEE calculation. • Set up production times, breaks, maintenances etc. in calendars.
Subscription	<p>The subscription to OEE includes 25 Assets, for which the OEE calculation can be set up, and 50 Named Users. Additional OEE Assets or Named Users can be upgraded for additional fees.</p> <p>The base subscription to OEE is included by default in Insights Hub Advanced Capability Packages and is available to subscribers of Insights Hub Standard Capability Packages.</p>
Third-Party Terms	The Third-Party Terms for OEE are available in the application' s OS bar.
Documentation	<p>For further details about OEE please see the documentation available via the following link:</p> <p>https://documentation.mindsphere.io/MindSphere/apps/insights-hub-oee/introduction.html</p>

Opcenter Intelligence

Description	<p>Opcenter Intelligence is a solution for manufacturing data reporting and analysis to speed up decision making on a global scale. This application extends Siemens' Opcenter portfolio by providing the capability to apply analytics and reporting techniques to operations and business data at all levels.</p> <p>Opcenter Intelligence provides insights into your equipment efficiency, root cause analysis and full transparency into your manufacturing operations enabling proactive identification of performance issues to improve operational efficiency.</p> <p>It includes the following capabilities:</p> <ul style="list-style-type: none"> • Provides insights into your equipment efficiency, root cause analysis and near-real time transparency into your manufacturing data across multiple manufacturing lines and sites. • Connects, organizes, and aggregates manufacturing data from various company data sources into cohesive and contextualized information to gain immediate and actionable insights. • Integrates data across Siemens Opcenter and third-party sources. • Collects, visualizes and analyzes equipment utilization and efficiency data. • Delivers timely access to both historical and near real-time information using interactive tools that allow you to identify trends and data relationships. • Provides you with intuitive KPI dashboards and near real-time visibility into downtime causes and manufacturing data. • Provides configurable and schedulable email notification services (e.g. for KPI deviations). Notifications sent may be blocked, delayed or prevented from being delivered by destination servers and other reasons outside of our control and there is no warranty that this service will be uninterrupted, secure or error free or that notifications will reach their intended destination during any stated time frame.
Subscription	<p>The base subscription to Opcenter Intelligence is included by default in Insights Hub Advanced Capability Packages and is available to subscribers of Insights Hub Standard Capability Packages.</p> <p>The base subscription to Opcenter Intelligence includes Insights Hub interfaces, manufacturing data model, 3rd party extension, contextualization, KPIs and oData plus 400 GB MDW, 15 Named Users and 50 Assets.</p> <p>Resources such as Equipment (Assets for MOM data ingestion) or MDW storage can be upgraded for additional fees. Additional features like Long Term Archive, Admin, Explorer and Viewer Named Users, or a dedicated environment for development and quality management purposes can also be made available for additional fees.</p>
Required Connectivity	<p>To connect the on-premises data of Siemens Opcenter and/or third-party applications to Opcenter Intelligence, you need to additionally purchase the Opcenter Connect Cloud Bundle (on-premises software) and install it on your system. The Opcenter Connect Bundle is subject to separate terms and conditions.</p>
Third-Party Terms	<p>The Third-Party Terms for Opcenter Intelligence are available in the application's OS bar.</p>

Documentation

For further details about Opcenter Intelligence please see the documentation available via the following link:

<https://documentation.mindsphere.io/MindSphere/apps/distribution/Opcenter-Intelligence.html>.

Quality Prediction

Description	<p>Quality Prediction represents a solution for production managers, quality engineers, manufacturing engineers and machine operators to discover complex relationship between production machine parameters and resulting product quality with application of Machine Learning (ML) technique. The ML model of the process established in the application is used to predict resulting product quality characteristics with input of actual manufacturing parameters in real time before a defect and quality loss occurs.</p> <p>Key capabilities of the solution:</p> <ul style="list-style-type: none">• Automatic prediction of the quality results by production data analytics.• Selection of machine data, quality data and ML model parameters with user interface in wizard form.• Visualization of machine and quality data including run-time charts, distribution histograms and correlation map.• Automatic pre-processing, aggregation and feature generation for machine and quality data.• Automatic training of selected ML model to solve regression problem for quality prediction.• Visualization of prediction results with true vs. predicted values chart, feature importance diagram and model accuracy analysis.• Output of predicted quality results in relation to specified tolerances.
Subscription	<p>Quality Prediction is available to subscribers of Insights Hub Standard and Advanced Capability Packages.</p> <p>The base subscription to Quality Prediction includes 3 Prediction Models and 50 Named Users. Additional Prediction Models and Named Users can be upgraded for additional fees.</p>
Third-Party Terms	<p>The Third-Party Terms for Quality Prediction are available in the application's OS bar.</p>
Documentation	<p>For further details about Hub Quality Prediction please see the documentation available via the following link:</p> <p>https://documentation.mindsphere.io/MindSphere/apps/Insights-hub-quality-prediction/introduction.html.</p>

Remote Services

Description	<p>Remote Services provides tunnel-based encrypted network-to-network access for using IP-based protocols under fine-grained access control.</p> <p>Such networks may either be "Service Networks" or "Device Networks" . Service Networks host apps and data on computers or servers, Device Networks host apps and data located on computers or embedded systems being part of machinery.</p> <p>With the Remote Services application, you can perform remote maintenance and troubleshooting, engineer machine controllers in a Device Network, and access a camera video stream.</p> <p>The application provides the following capabilities:</p>
-------------	--

	<ul style="list-style-type: none"> • Leverage preconfigured native or browser-based remote login protocols from within Service Networks to devices located in Device Networks. Fine-grained access control ensures that users have access only to those devices, which are assigned to them by an administrator. <ul style="list-style-type: none"> ○ "Service Devices" are devices registered with the Remote Services application for the purpose of being accessed. ○ "Service Data" means all data transfer related to usage or administration of the application functionalities. "Service Tunnel" means hosting of one Service Asset-specific communication protocol in a tunnel. • Route custom IP-based protocols from Service Networks to Device Networks. Example use cases are remote engineering and commissioning of Service Devices by using customer-provided tools from within a Service Network instead of within a Device Network. Furthermore, IP-based streams may be accessed. • Route custom IP-based protocols from Service Devices in Device Networks to apps or data located in Service Networks. Example use cases are access to ticketing systems or data storage. Furthermore, apps on Service Devices may integrate with apps or data on Insights Hub.
Subscription	<p>The base subscription to Remote Services includes 1 "Service Device" and 0.01 GB of monthly "Service Data" transfer.</p> <p>The base subscription to Remote Services plus additional 4 GB of monthly "Service Data" is included by default in Insights Hub Standard and Advanced Capability Packages. For subscribers of Insights Hub Essentials Capability Packages, it is available on demand.</p> <p>Service Devices and Service Data volume can be upgraded for additional fees.</p>
Limitations	<p><u>Endpoint (Client) Software.</u> Remote Services requires installation of, and we grant you a Perpetual license to, (i) a Device Endpoint (technically a device client) for establishing Service Tunnels with Service Devices located in Device Networks and which may also be used as a gateway for accessing Service Devices in sub-networks, and (ii) a Service Endpoint (technically an operator client) for establishing Service Tunnels with computational devices (such as a technician's PC or a server) located in Service Networks. Both Endpoints (clients) will be made available for download from the Platform.</p>
Third-Party Terms	<p>Third-Party Terms for Remote Services are available in the application's OS bar.</p>
Documentation	<p>For further details about Remote Services please see the documentation available via the following link:</p> <p>https://documentation.mindsphere.io/MindSphere/apps/remote-services-(rs)/RS-overview/RS-overview.html.</p>

Export Control Regulations

The Offerings described in this Insights Hub Add-ons Product Sheet have the following classification, unless expressly set out otherwise herein:

AL	N
ECCN	N/EAR99

Security Information

General	In order to protect plants, systems, machines and networks against cyber threats, it is necessary that you implement and continuously maintain a holistic, state-of-the-art industrial security concept.
Secure communication	Data transmission will be done via HTTPS protocol from Asset to your Account.

Definitions

General	Unless otherwise indicated, capitalized terms used in this document shall have the meaning given to them in this document or elsewhere in the Agreement. You may also want to check our Glossary .
---------	--