MindSphere IIoT for Makers
Product Sheet and Specific Terms

MindSphere IIoT for Makers provides you with an Account to connect Industrial equipment and consume the IoT data in Mendix applications.

With MindSphere IIoT for Makers you can:

- Easily connect and manage Industrial machinery,
- Build or extend a Mendix application with MindSphere IIoT for Makers capabilities,
- Use standard IoT applications in MindSphere,
- Use a seamless single-sign-on between MindSphere and Mendix accounts,
- Simply consume IoT data from MindSphere in your Mendix applications.

With the use of MindSphere IIoT for Makers, you have an integrated developer experience to build and integrate personalized Industrial IoT applications with Mendix.

Prerequisites	
Web browser	An HTML5 capable Internet browser is required (e.g. Mozilla Firefox, Google Chrome or Microsoft Internet Explorer). The recommended screen resolution is 1024x768 or higher.
Internet connection	The bandwidth of your Internet connection will determine your experience of the performance of the Services.
Mendix Account	For the purpose of access and use of MindSphere IIoT for Makers, Users' registrations through the Mendix websites are required. Furthermore, a Mendix License is required as described on https://docs.mendix.com/developerportal/deploy/licensing-apps-outside-mxcloud.
Data import	Import data to your Account through use of our designated MindSphere APIs.
Mendix Data Hub (optional)	MindSphere IIoT for Makers offers a tight integration into Mendix Data Hub which is designed to make an exchange of the MindSphere data model even more easy. To utilize this functionality, you must obtain a respective license as described on https://docs.mendix.com/data-hub/.

Description

Access to your Account	MindSphere IIoT for Makers provides you with a dedicated Account on MindSphere. You can single-sign-on to your Account right from your Mendix account. You can login into your Account via the respective URL provided by us.
General	Different sizes of MindSphere IIoT for Makers are available (Small/Medium/Large). You are only authorized to utilize the MindSphere IIoT for Makers size to which you hold a valid subscription.

MindSphere IIoT for Makers - Size Overview

	Small	Medium	Large
Base tenant	✔	✔	✔
Developer Cockpit	✔	✔	✔
Operations Insight	✔	✔	✔
Visual Flow Creator	✔	✔	✔
Services via MindSphere APIs[1]	✔	✔	✔
Native MQTT Services	✔	✔	✔

[1] Comprehensive set of Services available via MindSphere APIs can be found under https://developer.mindsphere.io/apis/index.html. Please note that Semantic Data Interconnect, Analytics Services and Integrated Data Lake Services are not included and must be subscribed to separately.

MindSphere IIoT for Makers - Authorized Limits

Should the actual usage of your MindSphere IIoT for Makers size repeatedly exceed one or more of the applicable limits below (e.g. the number of Users for your MindSphere IIoT for Makers size), and should you not order the appropriate increase of usage capacities for an additional fee, we reserve the right to suspend the Service. Other contractual rights and remedies remain unaffected.

	Small	Medium	Large
Users[1]	150	150	150
Asset types	5	25	50
Asset instances	50	500	2000
Connected Agents[2]	10	25	100
Time series data ingest rate [3]	2 KB/s	8 KB/s	32 KB/s
Time series data storage volume	60 GB	240 GB	960 GB
File storage	50 GB	200 GB	800 GB
Event types	10	50	100
Event instances	250 000	1 250 000	2 500 000
Notifications per month	4 000	16 000	64 000
Outbound-Traffic[4] per month	40 GB	160 GB	640 GB
Operations Insight: Rules[5]	10	50	250
Operations Insight: simple KPI's[6]	5	5	5
Operations Insight: Creators of dashboards and KPI's[7]	1	1	1

Visual Flow Creator Compute Hours	12	48	192

MindSphere IIoT for Makers – Tools

General	The following administration tools are available on your MindSphere Launchpad: • Usage Transparency • Settings • Asset Manager • Upgrade (once this feature is released – currently deactivated) • Developer Cockpit • Agent Diagnostic Third Party Terms for Launchpad and administration tools (Settings, Asset Manager and Upgrade) are available via the following web link: https://sie.ag/MindSphere-ThirdParty_Launchpad_Settings_AssetManager_Upgrade.
Usage Transparency	Usage Transparency provides information regarding your consumption of certain resources and corresponding limits of your MindSphere IIoT for Makers subscription and other subscribed Services e.g. • API calls • Number of Users • Inbound traffic • Data storage volume
Settings	Settings allow managing Users, permissions, rights, roles, groups, Collaborations and tenant provider information. For every User, an individual login is required.
Asset Manager	Use Asset Manager to: • Onboard and offboard Agents to your Account. • Configure assets, asset types and aspect types.
Upgrade	Please note that this functionality will be released at a later point in time and will not be available initially. Use Upgrade to: • Order available upgrades to your subscribed Services (e.g. increase Users or Agents). • Get an overview of your requested and completed upgrades. • Manage pending upgrade requests (authorized Users only).
Developer Cockpit	Use Developer Cockpit to: • Assign a new application to your own base tenant. • Manage versions of your application. A User can perform an update of an application. For detailed information on the individual process steps, please refer to the documentation available under https://documentation.mindsphere.io/resources/html/developer-cockpit/en-US/index.html. Third Party Terms for Developer Cockpit are available via the following web link: https://sie.ag/MindSphere-ThirdParty_DeveloperCockpit.

Agent Diagnostic	Use Agent Diagnostic to: • Activate and deactivate Agent logfiles and to access them.

Specific Terms	
MindSphere Supplemental Terms	Certain Services included in your subscription to MindSphere IIoT for Makers (such as Operations Insight and additional Services available via their respective MindSphere APIs) may be subject to specific terms and conditions that are set out in the MindSphere Supplemental Terms available at www.mindsphere.io/terms. The MindSphere Supplemental Terms form part of your agreement with us. When we introduce new features, supplements, enhancements, capabilities or Services (e.g. that were not previously included with your subscription to MindSphere IIoT for Makers but are added at no additional fee), we may make updates to the MindSphere Supplemental Terms that apply to your use of these new features, supplements, enhancements, capabilities or Services. Please review the MindSphere Supplemental Terms before using a Service that is not described in this Product Sheet.
Specific Terms for MindAccess Developer Plan	The Specific Terms for MindAccess Developer Plan available at www.mindsphere.io/terms apply accordingly to the developer services included in your subscription to MindSphere IIoT for Makers as if you had subscribed to a MindAccess Developer Plan with the following deviations: • The term "Developer Services" used in the Specific Terms for MindAccess Developer Plan shall include the developer services included in your subscription to MindSphere IIoT for Makers. • The restriction set out in section 2.1 (i) of the Specific Terms for MindAccess Developer Plan shall not apply. • Please note that as of the date of release of this Product Sheet & Specific Terms it is not possible to (i) upload your application to a MindAccess Operator Plan Account and (ii) make available your application to other MindSphere customers. Therefore, sections 3.2 and 3.3 of the Specific Terms for MindAccess Developer Plan shall not apply. • It is not possible to permit Third Parties to access the developer services included in your subscription for demonstration or testing of Your Applications for such Third Parties' end-use under a subtenant that you establish in your Account for each such Third Party.

Security Information for MindSphere IIoT for Makers	
Access credentials	Authentication and authorization on User level based on user name and password (Mendix federated credentials).
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.

Export Control Regulations for MindSphere IIoT for Makers	
AL	N
ECCN	N

Definitions for MindSphere IIoT for Makers

Agent	An Agent is a software as part of a hardware device (e.g. MindConnect Nano) or in the form of an Application provided by Siemens or a Third Party which you connect to your Account and which can ingest data into your Account and send data to one or more asset instances. The number of Agents equals the number of parallel data ingest channels. The data points that are ingested into the Account are associated to asset instances.
Asset	An asset is the logical representation of a thing which can be a machine or an automation system with a single or multiple automation unit(s) e.g. PLC or even a factory site. Assets are defined using an asset type.
Asset type	Asset type describes the type of an asset (e.g. a generic motor) including one or several attributes. An asset type is a template that describes the attributes of a homogenous group of physical or logical assets, which is used for asset modeling. Asset type is a grouping of assets with common characteristics that distinguish those assets as a group or class.
Asset instance	Asset instance reflects a physical and/or logical device within your Account, e.g. a specific motor within a factory would be an asset instance. Each instance belongs to an asset type.
Event	An event documents the occurrence of a defined situation (e.g. exceed temperature threshold or starting a motor).
Event type	The order and the content of an event instance are specified in the corresponding event type (e.g. timestamp, priority and description).
Event instance	Event instance represents the actual occurrence and includes the information defined in the event type (e.g.2018-07-10 15:45:23 | HIGH | Temperature high).
MindSphere Launchpad	After the login into your Account, the Launchpad appears. Similar to a desktop on any common operating system (OS), the MindSphere Launchpad facilitates starting various assigned applications. If you provide services to your customers, you must replace the Siemens service and support information provided in the MindSphere Launchpad with your companies' service and support information.
Native MQTT Services	Native MQTT Services are available via their respective MindSphere API and allow you to transfer data between your Account on the Platform and on-premise hardware devices or on-premise connectivity software from Siemens or from Third Parties, provided such hardware or connectivity software is compatible with the Native MQTT Services.
Operations Insight	With Operations Insight it is possible to explore the performance and condition of assets, products or lines in real time, get full and harmonized transparency and root cause of the data from connected assets, calculate KPIs, drill-down analysis, assign work orders within your team and get automatically notified upon exceeded thresholds.
Tenant	A tenant is a representation of a real-world organization. It covers properties like users, data, assets, entities etc.
Additional definitions	All other capitalized terms in this document shall have the meaning given to them in the MindSphere Agreement.

www.mindsphere.io/terms