Siemens MindSphere on Alibaba Cloud

MindAccess DevOps Plan

Product Sheet

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Alibaba Cloud

1. Introduction

MindAccess DevOps Plan consists of the following:

- MindAccess Developer Plan provides you with an Account to your own Resources on MindSphere to develop and test your applications. After development, the application can be transferred to productive resources provided as part of the MindAccess Operator Plan.
- MindAccess Operator Plan provides you with an Account to your own resources on MindSphere for productive operation and support of applications. MindAccess Operator Plan also enables you to provide the application to MindAccess IoT Value Plan subscribers.

1.1. Prerequisites

Item	Description
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.
Data import	Import data to your MindAccess Developer Plan Account or MindAccess Operator Plan Account through use of our designated MindSphere APIs.

2. MindAccess Developer Plan

Item	Description
Access to your Account	MindAccess Developer Plan provides you with a dedicated Account on MindSphere. You can login into your Account via the respective URL provided by us.
General	Different sizes of MindAccess Developer Plan are available (Small/Medium/ Large). You are only authorized to utilize the Plan size to which you hold a valid subscription.

2.1. MindAccess Developer Plan – Size Overview

Item	Size		
	Small	Medium	Large
Cloud Foundry development space	√	√	√
Highly available system[1]	√	√	√
Developer tenant	√	√	√
Developer Cockpit	√	√	√
Operations Insight	√	√	√
Fleet Manager	√	√	√
Services via MindSphere APIs[2]	√	√	√
Unlimited number of routes	√	√	√
Cross-Tenancy[3]	√	√	√
Supported build packs	Go, Java, Node.js, .Net core, PHP, Python, Ruby, Static File, Mendix		

[1)] Redundant application deployment possible; [2)] Comprehensive set of certain Services available via MindSphere APIs, e.g. Analytics Services, Notification Service, Token Manager Service etc. Authorized limits set out in this Product Sheet or in the MindSphere Supplemental Terms apply; [3)] Each shared asset via Cross-Tenancy leads to one used asset instance for the receiving tenant.

2.2. MindAccess Developer Plan – Authorized Limits

Should the actual usage of your Plan size repeatedly exceed one or more of the applicable limits below (e.g. the number of Users for your Plan 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.

Item	**Size**		
	Small	**Medium**	**Large**
Users[1]	10	50	100
Subtenants	1	5	10
Asset types	5	25	50
Asset instances	20	100	200
Operations Insight / Fleet Manager: Rules[2]	1	1	1
Operations Insight: simple KPIs[3]	1	1	1
Operations Insight: Creators of dashboards & KPIs[4]	1	1	1
Connected Agents[5]	1	5	10
Time series data ingest rate[6]	3 KB/s	13 KB/s	25 KB/s
Time series data storage volume	20 GB	100 GB	200 GB
File storage	10 GB	50 GB	100 GB
Cloud Foundry RAM size	2 GB	10 GB	20 GB
Concurrent instances of Backing Services – XS	2	4	6
Event types	10	50	100
Event instances	250 000	1 250 000	2 500 000
Notifications per month	1 000	5 000	10 000
Analytics Services: Number of API calls per month	500	1 000	1 500
Application uploads to MindAccess Operator Plan Account per month	1	5	10
Outbound Traffic[7] per month	60 GB	300 GB	600 GB

Supported build packs	Go, Java, Node.js, .Net core, PHP, Python, Ruby, Static File, Mendix

[1)] User can have different roles e.g. Admin, Developer etc.; [2)] Active concurrent. Further limits apply as set out in the MindSphere Supplemental Terms; [3)] Number of active concurrent KPIs, calculated every minute; [4)] Number of Users that have been assigned “Creator” role in user rights to be able to create dashboards and KPIs; [5)] Each connected Agent leads to one used asset instance; [6)] Data ingest is based on number of assets, number of variables per asset, size per variable, read cycle interval, sending frequency and overhead; [7)] Outbound Traffic is the total network traffic that is generated by the use of our Services by you and by Users of your application or operated application to devices, locations, databases, applications or other destinations outside the Platform via the exit of the wide area network of the data centers used by us to provide the respective Services. Outbound Traffic includes also data transfer for visualization purposes to e.g. a web browser.

2.3. MindAccess Developer Plan – Tools

Item	Description
General	The following administration tools are available on your MindSphere Launchpad: • Developer Cockpit • Usage Transparency • Settings • Asset Manager • Agent Diagnostic • Upgrade
Developer Cockpit	Use Developer Cockpit to: • Assign a new application to your own developer tenant. • Manage versions of your application. A User can perform an update of an application in order to transfer and assign it to a MindAccess Operator Plan Account. • Transfer of new or updated applications to a MindAccess Operator Plan Account: You decide which application you want to make available for productive deployment by uploading it together with additional information to an intermediate repository. The transfer process cannot be withdrawn after the upload. You will be notified via the Developer Cockpit and via email once the transfer of your application has been successful

	and the application is available to run on the MindAccess Operator Plan Account. For detailed information on the individual process steps, please refer to the MindSphere DevOps Guide. Third Party Terms for Developer Cockpit are available via the following web link: https://sie.ag/MindSphere-ThirdParty_DeveloperCockpit.
Usage Transparency	Usage Transparency provides information regarding your consumption of certain resources and corresponding limits of your MindAccess Developer Plan 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, subtenants and tenant provider information. For every User, an individual login is required. A third party User which you permit to test the application for such third parties' end use shall not be granted with administration rights, except for administration rights that are offered by the user management of a subtenant.
Asset Manager	Use Asset Manager to: • Onboard and offboard Agents to your Account. • Configure assets, asset types and aspect types. • Manage the Sharing of assets under a Collaboration between Accounts using Cross-Tenancy.
Agent Diagnostic	Use Agent Diagnostic to: • Activate and deactivate Agent logfiles and to access them.
Upgrade	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).

3. MindAccess Operator Plan

Item	Description
Access to your Account	MindAccess Operator Plan provides you with a dedicated Account on MindSphere. You can login into your Account via the respective URL provided by us.
General	Different sizes of MindAccess Operator Plan are available (Small/Medium/ Large). You are only authorized to utilize the Plan size to which you hold a valid subscription.

3.1. MindAccess Operator Plan – Size Overview

Item	Size		
	Small	Medium	Large
Cloud Foundry productive space	√	√	√
Highly available system[1]	√	√	√
Productive tenant	√	√	√
Operator Cockpit	√	√	√
Operations Insight	√	√	√
Fleet Manager	√	√	√
Services via MindSphere APIs[2]	√	√	√
Unlimited number of routes	√	√	√
Cross-Tenancy[3]	√	√	√
Supported build packs	Go, Java, Node.js, .Net core, PHP, Python, Ruby, Static File, Mendix		

[1)] Redundant application deployment possible; [2)] Comprehensive set of certain Services available via MindSphere APIs, e.g. Analytics Services, Notification Service, Token Manager Service etc. Authorized limits set out in this Product Sheet or in the MindSphere Supplemental Terms apply; [3)] Each shared asset via Cross-Tenancy leads to one used asset instance for the receiving tenant.

3.2. MindAccess Operator Plan – Authorized Limits

Should the actual usage of your Plan size repeatedly exceed one or more of the applicable limits below (e.g. the number of Users for your Plan 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.

Item	**Size**		
	Small	**Medium**	**Large**
Users	5	10	25
Subtenants	2	2	2
Asset types	5	25	50
Asset instances	20	100	200
Operations Insight/ Fleet Manager: Rules [1]	1	1	1
Operations Insight: simple KPIs[2]	1	1	1
Operations Insight: Creator of dashboards & KPIs[3]	1	1	1
Connected Agents[4]	1	5	10
Time series data ingest rate[5]	3 KB/s	13 KB/s	25 KB/s
Time series data storage volume	20 GB	100 GB	200 GB
File storage	10 GB	50 GB	100 GB
Cloud Foundry RAM size	2 GB	10 GB	20 GB
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assets, number of variables per asset, size per variable, read cycle interval, sending frequency and overhead; [6)] Outbound Traffic is the total network traffic that is generated by the use of our Services by you and by Users of your application or operated application to devices, locations, databases, applications or other destinations outside the Platform via the exit of the wide area network of the data centers used by us to provide the respective Services. Outbound Traffic includes also data transfer for visualization purposes to e.g. a web browser.

3.3. MindAccess Operator Plan – Tools

Item	Description
General	The following administration tools are available on your MindSphere Launchpad: • Operator Cockpit • Usage Transparency • Settings • Asset Manager • Agent Diagnostic • Upgrade
Operator Cockpit	Use Operator Cockpit to: • Accept the transfer of an application from a MindAccess Developer Plan Account to your MindAccess Operator Plan Account. • Deploy the Cloud Foundry application to the productive environment and operate. • Register self-hosted applications in the productive environment and operate. • Get an overview of all your applications running on your MindAccess Operator Plan Account. • Get information on usage and traffic. • Check health status of all your applications. • Receive and display notifications concerning your applications. • Provision applications to MindAccess IoT Value Plan subscribers (and their Users) on the basis of an App Customer Contract between you and their subscribers. For detailed information on the individual process steps, please refer to the MindSphere DevOps Guide and MindSphere Marketing Guide. Please note that MindAccess IoT Value Plan is not available in certain countries.
Usage Transparency	Usage Transparency provides information regarding your consumption of certain resources and corresponding limits of your MindAccess Operator Plan 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, subtenants and tenant provider information. For every User, an individual login is required. A third party User which you permit to test the application for such third parties' end use shall not be granted with administration rights, except for administration rights that are offered by the user management of a subtenant.
Asset Manager	Use Asset Manager to: • Onboard and offboard Agents to your Account. • Configure assets, asset types and aspect types. • Manage the Sharing of assets under a Collaboration between Accounts using Cross-Tenancy.
Agent Diagnostic	Use Agent Diagnostic to: • Activate and deactivate Agent logfiles and to access them.
Upgrade	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).

4. Other Services as part of MindAccess DevOps Plan

Your subscription to MindAccess DevOps Plan also includes access and the use of other Services made available to you. This includes e.g. Operations Insight and additional Services available via their respective MindSphere APIs. Such Services may be subject to specific terms and conditions that are set out in the MindSphere Supplemental 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 the subscription to your MindAccess Developer Plan and/or MindAccess Operator Plan 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.

5. Security Information for MindAccess DevOps Plan

Item	Description
Access credentials	Authentication and authorization on User level based on user name and password.
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.

6. Export Control Regulations for MindAccess DevOps Plan

Item	Description
AL	N
ECCN	N

7. Definitions for MindAccess DevOps Plan

Item	Description
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.
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.
Backing Services	Backing Services include any services which an application utilizes over the network as part of its normal operation. Examples include data stores (such as PostgreSQL), messaging/queueing systems (such as RabbitMQ) or caching systems (such as Redis). Backing Services are available in different sizes, e.g. XS or M. This relates to available memory, storage space and additional properties like high availability.
Backing Service instance	Backing Service instance is a running and instantiated Backing Service in a certain configuration/size.
Cloud Foundry Org (CF Org)	CF Org is an environment to test and operate applications.

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).
Fleet Manager	Fleet Manager provides an overview of your assets configured in a respective Account, and allows for searching and filtering of relevant assets based on various criteria. You can define rules in the Fleet Manager that monitor the data points of the respective assets and define resulting actions like sending notifications or setting the status indication after the occurrence of an event set by you, e.g. in case the data relating to a certain asset exceeds a threshold defined by you in the Fleet Manager.
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 service and support information provided in the MindSphere Launchpad with your companies' service and support information.
Operations Insight	With Operations Insight it is possible to explore performance and condition of assets, products, or lines in real time, to get full and harmonized transparency and root cause of data from connected assets, to calculate KPIs, to assign work orders within your team and get automatically notified once the thresholds value is violated.
Subtenant	A subtenant is a certain limited resource of a tenant and represents a subpart of your own real-world organization. In a MindAccess Developer Plan, a subtenant also represents the real-world organization of a third party that you permit to test applications for such third parties' end use. A subtenant is also

	used to assign applications and provide access to applications.
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.