Drivetrain Analyzer Cloud Product Sheet

Introducing Drivetrain Analyzer Cloud, a powerful application that grants you seamless access to all the crucial data regarding your drivetrain assets and equipment. With your Tenant[1], you can effortlessly tap into all the relevant information associated with your installed equipment.

This comprehensive application offers a wide range of features designed to assist you in effectively managing the health and energy performance indicators of your drivetrain equipment. Drivetrain Analyzer Cloud provides you with consolidated statistics and tracking of your fleet, AI and analytics-based fault detection along with individual health and efficiency KPIs, a convenient logbook, detailed drivetrain equipment profiles and comprehensive product information.

By leveraging the capabilities of Drivetrain Analyzer Cloud, you can streamline your fleet maintenance tasks, minimize unscheduled downtime, and significantly enhance the overall availability of your plant.
The Drivetrain Analyzer Cloud Package comprises the application itself, along with the necessary resources to access the Platform and fully utilize its capabilities.

[1] Tenant can be provided by Base Environment or user can use their existing tenants.

Prerequisites	
Hardware	The Drivetrain Analyzer Cloud application requires specific hardware devices and connection modules to collect data from different drivetrain assets. For motors and other drivetrain equipment, we support the use of SIMOTICS CONNECT 400 (SC400) and Connection Module IOT (CM IOT), which can also be used as generic vibration sensors. In addition, MindConnect devices (and others see here) are recommended for connecting frequency converters and CMS1200 channels. These hardware components allow seamless data transfer to our application.
Web browser	An HTML5 capable Internet browser is required (e.g. Mozilla Firefox, Google Chrome or Microsoft Internet Explorer/Edge). The recommended screen resolution is 1024x768 or higher. This application can be used on any mobile device that comes with an HTML5 capable web browser.
Data access	To access and use the application, data stored in your existing tenant (e.g. Base Environment or Insights Hub Capability Package tenant) may be accessed by the application. Drivetrain Analyzer Cloud application does not fully support - SDS feature.

Description of Drivetrain Analyzer Cloud application

Main functionalities[3]	The Drivetrain Analyzer Cloud application offers a comprehensive set of functionalities for health and energy monitoring of drivetrain equipment. The application is divided into several sections. Here's a summary of the main sections:
	Homepage: Gain a holistic view of all connected drivetrain assets through customizable widgets, including plant, fleet, and asset overviews, a logbook, a map view, and health and energy efficiency insights.
	Asset list: Easily search, filter and sort assets by type, failure mode, energy consumption and more.
	Hierarchy: Build a hierarchy tree for your plant to reflect your physical structure, consisting of six levels: plant level, process area level, machine level, driveline level, asset level and sensor level.
	Map view: Visualize your assets on a map for easy location tracking.
	Global Logbook: Review historical events, including status updates, alarms and faults of all your drivetrain assets Additional features include: • Get detailed statistics about the health of your equipment, including operating time and specific failure types like bearing failures. • Understand your energy consumption, and potential energy savings of your feet and the specific drivetrain assets. • Visualize data with graphs and curves, showing time series data such as speed, torque, and vibration. • Receive recommendations for vibration limits based on your equipment usage and condition. • View a history of events, including status updates, alarms, and faults. • Access important information about your connected drivetrain equipment, like rating plates with mechanical and electrical data. • Activate mail notifications and manage SC400 or CM IOT settings and status visualization. • Customize signal thresholds for your equipment. • Easily export asset information and data into CSV files. • Utilize motor-specific maintenance counters or create custom counters • Find product documentation, Siemens Customer Service platforms, service contacts, and links to spare part information and support resources. [3] Main functionalities are listed according to motor asset type. Functionalities can be different for different asset types (e.g. Drives, General Vibration sensors, CMS1200 etc) For detailed info please check the Drivetrain Analyzer Cloud Operating manual https://support.industry.siemens.com/cs/ww/en/view/109769880

Description of Insights Hub Resources

The following Insights Hub resources ("Insights Hub Resources") are included in the Drivetrain Analyzer Cloud Package or its extensions. These have been selected to ensure proper operation of Drivetrain Analyzer Cloud application.	
Base Environment	The Base Environment provides you with a dedicated tenant (also referred to as" Environment") on Insights Hub. It enables you to login to your tenant via the respective URL provided by us and is required for use of the application and Insights Hub Resources. The Base Environment includes 1 Admin User and provides you with the following administration tools available on the Insights Hub Launchpad:

- Usage Transparency: provides information regarding your consumption of Insights Hub Resources.
- Agent Diagnostic: allows you to activate and deactivate agent logfiles and to access them.
- Settings: allow managing Users, permissions, rights, roles, groups, Collaborations, and environment provider information. For every User, an individual login is required. Access policies are available only upon request. Insights Hub sales representative or Insights Hub Support to be contacted to enable use of access policies.
- Asset Manager: use Asset Manager to onboard & offboard agents to your tenant; to configure assets, asset types and aspect types; to manage the Sharing of assets under a Collaboration between tenants using Cross-Tenancy.
- Upgrade: can be used to order available upgrades (incl. add-ons) to already Offerings; to get an overview of requested and completed upgrades; to manage pending upgrade requests (authorized Users only).
- The Base Environment provides you with the following "Connect your Things" connectivity capabilities:
- To connect assets using your own PC as a gateway with MindConnect Software Agent.
- To connect individual hardware using MindConnect API services, MindConnect MQTT Services, MindConnect OPC UA PubSub Services and MindConnect Library.
- To use MindConnect Hardware e.g. MindConnect Nano, MindConnect IoT2040, MindConnect IoT2050.
- Zero touch onboarding using MindConnect OPC UA PubSub Services and MindConnect MQTT Services.
- To maintain connected devices by using MindConnect Device Management Services.

For more information regarding Connect your Things capabilities, please refer to the Product Sheet for Insights Hub and Industrial Iot capabilities available at https://documentation.mindsphere.io/MindSphere/index.html

Additional Resources	In addition to the Base Environment, the following Insights Hub Resources are included in the Drivetrain Analyzer Cloud Package and its extensions:

- Asset Attributes
- Events
- File Storage
- Notifications E-Mail
- Time Series Data Ingest Rate
- Time Series Data Storage

For general descriptions of the Insights Hub Resources listed above, please refer to the Glossary.

Drivetrain Analyzer Cloud Package Overview

Application subscription	Drivetrain Analyzer Cloud Starter
Fee	See Order[1]
Drivetrain Analyzer Cloud Starter contains the following Resources to be able to onboard and host 1 SC400 or CM IOT device in the application	
Drivetrain Analyzer Cloud application	✓
Base Environment[2]	✓
User	5
Asset Attributes	70
Time Series Data Ingest Rate	0.01 KB/s
Time Series Data Storage	1 GB
E-mail notifications module[3]	1
Events module[4]	1
File Storage	1 GB

Extensions (for application and Resources)	Drivetrain Analyzer Cloud 1/20/35/200 Assets			
Drivetrain Analyzer Cloud 1/20/35/200 Assets contains the following Resources and depending on the selected Drivetrain Analyzer Cloud Asset size, you are able to onboard and host 1 / 10 / 35 / 200 SC400 or CM IOT devices in the application..				
	1 Asset	10 Assets	35 Assets	200 Assets
Fee	See Order[1]	See Order[1]	See Order[1]	See Order[1]
Asset Attributes	70	700	2450	14000
Time Series Data Ingest Rate	0.01 KB/s	0.1 KB/s	0.35 KB/s	2 KB/s
Time Series Data Storage	1 GB	5 GB	18 GB	100 GB
Events module[4]	1	10	35	20
File Storage[5]	1 GB	1 GB	8 GB	40 GB

Extensions (for Drive)	Drivetrain Analyzer Cloud Drive Asset
Drivetrain Analyzer Cloud Drive Asset contains the following resources, and you are able to onboard 1 drive asset to Drivetrain Analyzer Cloud Application	
Fee	See Order[1]
Asset Attributes	40
Time Series Data Ingest Rate	0.04 KB/s
Time Series Data Storage	4 GB
E-mail Notification module[3]	1
Events Module[4]	1
File Storage[5]	1 GB

Extensions (for CMS1200)	Drivetrain Analyzer Cloud CMS1200 Asset
Drivetrain Analyzer Cloud CMS1200 Asset contains the following resources, and you are able to onboard 4 channels of CMS1200 assets to Drivetrain Analyzer Cloud Application	
Fee	See Order[1]
Asset Attributes	140
Time Series Data Ingest Rate	0.06 KB/s
Time Series Data Storage	6 GB
E-mail Notification module[3]	1
Events Module[4]	1
File Storage[5]	2 GB

Extension (for Resources)	Drivetrain Analyzer Cloud E-mail
Fee	See Order[1]
E-mail Notification module[3]	1

Extension (for Resources)	Drivetrain Analyzer Cloud File
Fee	See Order[1]
File Storage	1 GB

Extension (for Resources)	Drivetrain Analyzer Cloud Events
Fee	See Order[1]
Events Module[4]	1

Extension (for Resources)	Drivetrain Analyzer Cloud Subtenant
Fee	See Order[1]
Subtenant module	1

Extension (for Resources)	Drivetrain Analyzer Cloud User
Fee	See Order[1]
User module	5 user

[1] Subscription-based pricing is set forth in the Order; [2] Base Environment can be created and provisioned to you as part of your Drivetrain Analyzer Cloud Starter subscription or the Drivetrain Analyzer Cloud Starter (without a Base Environment) shall be added to an existing tenant (e.g Insights Hub Capability Package tenants). A Package can only be added to an existing tenant if the tenant and Package are hosted in the same data centre location. If you decide to add various Packages to one existing tenant, please note the following: The Resources included in the various Packages will be combined under one tenant; it is your responsibility to allocate the Resources to the various Packages according to your needs. The combination of Resources under one tenant may lead to technical limitations in their accessibility and should therefore not exceed the limits set out under https://documentation.mindsphere.io/MindSphere/index.html [3] Notifications in form of emails included in the Packages are limited. If the actual usage of notifications exceed the applicable limits above, the User will not receive emails anymore. Each module contains 1000 notifications; [4] Events included in the Packages are limited. If the actual usage of events exceeds the applicable limits above, no more events (logs) will be generated. Additional events can be ordered with an additional fee. Each module contains 1000 events; [5] File storage differs according to package size

General

Subscription Term	The standard Subscription Term for the application is 12 or 36 months, and extensions are 12 months. The Subscription Term shall automatically renew if stated in the Order.
Co-term (renewal and termination)	The Subscription Term for extensions will be co-termed with the Subscription Term of the application and therefore can be shorter than the standard Subscription Term. If an application subscription is terminated, the associated extensions will also be terminated at the same time.
Payment terms	The fee for Drivetrain Analyzer Cloud Stater and all extensions described herein is charged in advance for the entire Subscription Term.
Trial	Drivetrain Analyzer Cloud Starter is available as a "Trial" version. The Trial term and conditions are defined in the Insights Hub Supplemental Terms available on www.siemens.com/sw-terms/supplements.
Service Level Agreement	The monthly Availability for this application is at least 95%. Monthly Availability is defined in the Cloud Services Support and Service Level Framework available at https://www.siemens.com/sw-terms/sla.
Third-Party Terms	The Third-Party Terms for Drivetrain Analyzer Cloud application are made available via the following web link: https://www.sw.siemens.com/en-US/sw-terms/mindsphere-third-party-terms/ .
Support	Support may be contacted via web with following link: https://siemens.com/supportrequest/ Support is available in English and German.

Export Control Regulations

Applicable for SIDRIVE IQ Fleet application and Insights Hub Resources.	
AL	N
ECCN	N

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.
Encryption standard	TLS 1.2 for communication between asset and Account is used.
Access credentials	Authentication and authorization on User level based on username and password. Multi-factor authentication is recommended to be enabled in your Account for improved security.

Definitions

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

https://siemens.mindsphere.io/en/docs/Product-Descriptions-Overview