Aspect Model Catalog

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This performance specification outlines the scope of the features of the Aspect Model Catalog software (hereinafter referred to as "**Application**" or "**AMC**") by Robert Bosch Manufacturing Solutions GmbH, BCI — Bosch Connected Industry (hereinafter referred to as "**Bosch**" or "**Provider**"). It applies in conjunction with a quotation allowing the customer to use the Application and the "SaaS Terms and Conditions" of Robert Bosch Manufacturing Solutions GmbH, Bosch Connected Industry product area (available at: https://www.bosch-connected-industry.com/de/media/en/agb/bci_saas_nutzungsbedingungen.pdf). The customer and Provider are hereinafter also referred to as the "**Parties**" and, individually, the "**Party**." The performance specification describes the services that are provided to the customer in connection with the provision of the Application by Bosch, as well as the respective customer obligations.

1   Definitions

a.   The term "**service**" refers to the temporary provision of the Aspect Model Catalog software application by the Provider to the customer on the basis of "Software as a Service."

b.   The term "**Application Programming Interface**" or "**API**" means a programming interface that can be used (consumed) by one piece of software to communicate with another piece of software.

c.   The term "**digital twin**" refers to the virtual identifiable representation of an element of the real world in an IT system (e.g. the digital twin of a product or machine).

d.   The term "**aspect**" refers to a separate data interface made available by either the Provider or the customer that forms an information bundle. Aspects are associated with a digital twin. The structured description of the information bundle for an aspect is created using an aspect model.

e.   The term "**aspect model**" refers to a structured form of information description for complex data, which allows this data to be placed in a technical context and provided with meta-information describing its meaning.

f.   The term "**namespace**" refers to the structuring element that combines several aspect models under a single unique name. The unique nature of the namespace is ensured by defining the name using a Uniform Resource Name (URN) and a version number.

g.   The term "**aspect endpoint**" refers to the address information (e.g. an IP address or a URL) that a piece of software requires in order to call up specific data relating to an aspect via API.

h.   The term "**client**" refers to the highest structuring entity for customers of an access-restricted IT system. The client is a unit within the system that is closed from a data technology and organization perspective and is used to map companies or related groups of users.

2   Service

The Aspect Model Catalog Application is a software application used for centralized management of namespaces and aspect models. Software applications that use aspect models use the AMC to manage and locate aspect models. A more detailed description of the functions can be found in section 3.

2.1 Provision of and Access to the Service

a. The Application is a software application that Bosch provides to the customer for a limited period of time on the basis of "Software as a Service" (hereinafter referred to as "**SaaS**"), based on the contractual term and contractual scope defined in the quotation. The Application is provided at the Internet nodes of the data center operated by the cloud provider commissioned by Bosch.

b. Access to the AMC requires valid authentication by the user client (access restriction). The necessary access information is provided to the customer prior to provision of the service by the Provider.

c. The AMC can be used to communicate via the available Application Programming Interfaces or APIs.

d. If the customer wishes to receive personalized advice from Bosch on the use of the functions of aspect models and their management in AMC, this requires the conclusion of a separate agreement on the basis of a quotation from Bosch. Personalized advice does not form part of the service. This additional service is subject to a charge.

2.2 User Documentation and Language Versions

During the term of the agreement, Bosch will provide the customer with the latest version of the user documentation for the AMC. The user documentation will be provided in English only. The user documentation is available at https://docs.bosch-semantic-stack.com. The documentation includes a description of the concepts of the AMC plus a description of the APIs, including examples of usage.

If the customer requires a translation of the user documentation or an alternative language version of the user interface (e.g. due to legal requirements), a corresponding agreement must be reached with Bosch.

3   Functions of the Application

The Application has the following functions:
- Publication of namespaces
- Location of aspect models
- Status management for namespaces
- Deletion of namespaces
- Provision of namespaces
- Visualization of aspect models
- Ensuring access restrictions for the interfaces of the AMC

The use of aspect models standardizes and unifies the description of data for the customer.

3.1 Publication of Namespaces

Once a valid aspect model with a unique namespace has been created by the customer, it can be published via the AMC user interface or AMC API provided and thus made visible to other users.

3.2 Location of Aspect Models

Customer aspect models can be found using the AMC user interface and the AMC API based on their characteristics.

3.3 Status Management for Namespaces

The Aspect Model Catalog gives the option to manage the namespaces and their aspect models in the "Draft," "Approved" and "Deprecated" statuses. Namespaces with the "Approved" status cannot be deleted. Namespaces with the "Draft" status can be deleted.

3.4 Deletion of Namespaces

The namespaces published by the customer that are in the "Draft" status can be deleted using the AMC user interface and the AMC API. Namespaces that have already been approved cannot be deleted.

3.5 Provision of Namespaces

The namespaces published by the customer can be downloaded as an archive using the AMC user interface and the AMC API.

3.6 Visualization of Aspect Models

The aspect models defined by the customer can be visualized as a graphic using the AMC user interface.

3.7 Ensuring Access Restrictions for the Interfaces

In principle, all calls to the ACM APIs are access restricted and require explicit authentication/authorization.

4   Restrictions

4.1 Spatial Restriction

The Application may only be used and installed in Germany, Poland, Netherlands, Romania and Czech Republic.

4.2 Technical restrictions

a. The Application does not allow downstream software artifacts (such as interface descriptions or class and object models) to be generated from aspect models.
b. The Application does not allow the creation of aspect models.
c. Aspect models are not part of the service.
d. The Application does not allow manual editing of aspect models.

4.3 Restriction by intended use

a. The Application is not suitable for all intended uses, as there are special regulations for using software, for example in the field of medical technology, pharmacology, critical infrastructure, mobility outside of productions and in the energy sector, which means that it must be agreed in each individual case whether the Application is suitable for the planned intended use.

b. Use of the Application for military purposes is also not permitted. Use of the Application to administer digital twins of people is not permitted. Use for private purposes is not permitted.

5 System Requirements

In order to use the Application, the Customer must ensure that the requirements applicable to the system environment (hereinafter referred to as "**System Requirements**") are met prior to installation and during operation of the Application.

a. To reach the APIs, the Application requires an Internet connection with at least 4 Mb/s download and 4 Mb/s upload, 20 ms round-trip time (RTT).

b. The Application is used via a web browser (version 120 or later of Microsoft Edge browser; version 120.0.6099.199/200 or later of Google Chrome; or version 121.0.1 or later of Mozilla Firefox).

If system requirements change over time (e.g. due to the release of new third-party software), Bosch will provide the customer with an updated version of this performance specification.

6 Hosting

The Application is hosted in the European Union.

7 Services, Support and Remote Access

If the customer requires installation services, software development services and consulting services for the Application that are not part of the documented scope of service, a separate order from Bosch is required on the basis of a quotation.

If the customer wishes to use any additional software in conjunction with the AMC, we recommend that the customer agrees this with Bosch.

Warranty support requests can be directed to Customer Service at support.semantic-stack@de.bosch.com. Requests for all other support services can be directed to the Provider. They are not part of the scope of service and the provision of support services requires a separate agreement between the Provider and the customer. If it is

determined that there is no warranty case when processing an Application incident reported by the customer as a warranty case, the Provider is entitled to charge the customer for the expense incurred. The Provider reserves the right to decide freely whether support will be provided for such support requests, and can charge the customer the costs incurred according to the time and outlay involved.

If and to the extent that the Provider would need to access the Application in the event of a customer support request, we would point out that the Provider does not offer remote access to the Application as part of the standard service. This is therefore not part of the scope of service.
Such remote access to the Application requires a separate agreement with the Provider and, if necessary, the conclusion of an order processing agreement ("**OPA**").

The Provider also offers the customer training on the Application on the basis of a separate quotation and against payment of a fee.

8   OSS Components

The OSS components used in the Application can be accessed in the Application.

9   Customer Obligations

The customer is responsible for the operation of the customer's computer, including backups, as well as for the infrastructure for any software that consumes the Provider's offering. This Application may be used only by customers who comply with all of the terms and conditions set out in this document.