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Replacing GB/T 22454-2008

Enterprise modelling and architecture - Constructs for enterprise modelling

企业建模与体系结构 企业建模构件

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 22454-2008 "Enterprise Integration Enterprise Modeling Components". Compared with GB/T 22454-2008, except for the structure in addition to adjustments and editorial changes, the main technical changes are as follows.

a) The terms and definitions have been changed to reflect the latest practices and to align with ISO 15704 and ISO/IEC/IEEE 42010 (see Section 3 Chapter 3 of the 2008 edition);

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b) Added four components of material (metamodel, core components, concretization and model view) (see 6.1);

c) Changed the classification of components, separating them into a smaller number of core components and concretizing them (which can be extended by model users) (See 6.3, Chapter 7, Chapter 8, and 6.1 of the 2008 edition);

d) Added service components as core components to be specific to services (see 8.3);

e) Added a role core component as a generalization of organizational roles, operational roles and individual profiles (see 7.10);

f) Added performance indicator core components to support business monitoring and process improvement (see 7.15);

g) Added activity descriptions that break down business activities into sub-activities (see 7.3.4);

h) The functional entities have been changed to reduce the number of core structures and replaced with "activity resources" (see 7.13.2, see 6.12 of the 2008 edition);

i) New clauses have been added to explain why and how binding rules of conduct are needed (see A.1).

This document is equivalent to ISO 19440:2020 Enterprise modelling and architecture - Enterprise modelling component.

Introduction

This document specifies the common concepts required by industrial enterprises to build enterprise models and which are necessary for industrial enterprises to use the framework.

Based on ISO 19439, this document specifies and describes in detail a set of user-oriented modeling language components that include common the purpose of model building is to the model supports operational decision making and also enables the model to be used for model-based operational monitoring and control.

The modeling language components specified in this document can be concretized, combined, or combined simultaneously into structures with specific purposes, such as an industry or business unit or a specific type of business need (such as maintenance). This structure and common modeling language components can be used to develop A specific model for a specific business.

Computer-supported enterprise modeling requires some essential core components; the characteristics of these core components are determined by several general requirements.

These general requirements include.

a) Provide a clear business process model, including the operations, functions, information,

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resources, relationships and organizational responsibilities of the business process;

b) detailed design and conditioning of the enterprise components in order to create a model for a specific enterprise;

c) support the management of change;

d) Expression oriented to end users to facilitate their use.

Note: All Unified Modeling Language (UML) class model graphics are computer-generated Scalable Vector Graphics (SVG).

All generalization-specification relationships in the model are colored red. Figures B.10 and B.11 are line graphs.

The names of terms representing core components (see Chapter 7) and derived components (see Chapter 8) are capitalized throughout this document to help readers identify them.

They are used to distinguish them from the general usage of the same term, particularly to distinguish component capabilities, domains, enterprise activities, events, and resources from capabilities, domains, and it is distinguished from the general usage of enterprise domains, enterprise activities, events, and resources.

Enterprise Modeling and Architecture Enterprise Modeling Components

1 Scope

This document identifies and lists the components that users need to model an enterprise in accordance with ISO 19439.

This document is applicable to (but not limited to) engineering and the integration of manufacturing and related services in an enterprise. These components allow the structure of an enterprise to be described.

This document specifies an implementation framework in Chapter 6 for converting models into Type components are mapped into such domains.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

The terminology databases used for standardization maintained by ISO and IEC are located at.

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