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GB/T 39260.2-2020

**Use case methodology - Part 2: Definition of the templates for
use cases, actor list and requirements list**

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Foreword

GB/T 39260 "Use Case Method" is currently divided into the following parts.

---Part 2.Use case template, participant list and requirements list definition.

This part is Part 2 of GB/T 39260.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to the use of IEC 62559-2:2015 "Use Case Method Part 2.Use Case Template, Participant List and Requirements"

Seek the definition of the list.

This section has made the following editorial changes.

--- Deleted "Note 2" in 3.31;

---Additional reference to Appendix A (see 4.1.3);

--- Deleted the footer in the reference.

This part is proposed and managed by the National Standardization Technical Committee for Voltage, Current Rating and Frequency (SAC/TC1).

Drafting organizations of this section. China Machinery Productivity Promotion Center, State Grid Shanghai Electric Power Research Institute, State Grid Henan Electric Power Company

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Introduction

For complex systems, the use case approach allows different technical committees and even different organizations to achieve a common understanding of functions, participants and processes.

knowledge. This method is easy to analyze the requirements of new standards or existing standards after the development of software engineering tools, so as to support the compilation of standards. turn off

Refer to IEC 62559-1 for further demonstration and background information on the use case method.

Figure 1 gives an overview of the IEC 62559 series of standards, mainly describing the relationship between IEC 62559-2 and IEC 62559-3.

Figure 1 IEC 62559 series standards

IEC 62559-1. Concepts and processes in standardization.

IEC 62559-1 is the basis of the common use case library, and the purpose is to collect use cases on a common collaboration platform within the scope of IEC. Use case library also

It is used to coordinate different use cases to provide widely accepted common use cases as the basis for further standardization. The standard describes the use case side

The process and basic content of the law, such as terminology and use case types.

IEC 62559-2. Definition of use case template, participant list and requirement list.

IEC 62559-2 defines the structure of the use case template, a list of participants and a list of requirements. This standard is mainly based on the previous IEC PAS62559

Specification, and should be used together with IEC 62559-1.

IEC 62559-3. Use case template definitions are converted to XML serialization format.

Based on IEC 62559-2, IEC 62559-3 defines its core concept and its serialization as a use case template in XML format, and clear participants

Orders and detailed requirements list. The purpose of XML format is to transfer template content to other engineering systems (such as UML modeling tools).

These standards take energy systems and smart grids as examples, and can also be applied to other fields and systems. Based on this standard will be established in the future UML file definition.

purpose

The Standardization Management Bureau (SMB) of IEC made SG3 Resolution No. 7 (SMB/4204/DL No. 137/10) at the February.2010 meeting.

Resolution), and put forward the urgent need to provide a common use case library for all smart grid applications. Therefore, the international standard IEC 62559

Example method". However, the purpose of the use case method described in this section is to have wider standardized applications outside of smart grid systems.

Increasingly complex systems such as smart grids or smart cities have led to the need for system-level management. The solution to this problem requires more

Domain expertise (involving different technical committees in standardization), and should be further developed by the relevant technical committee responsible for formulating specific standards.

Refine and share to provide support for system-level functions.

An effective way to deal with this type of problem is to set up some general methods and terminology. The use case method is the latest technology in this field.

Technology can support further engineering activities.

The use case method provides a unique way for experts/technical committees of different backgrounds, such as energy systems or business flow

Experts in the field of engineering knowledge and system/IT experts that define interactive information and communication can share ideas and needs for new use cases or new businesses.

begging. In the process of requirements development, domain experts provided general ideas and functional requirements. The purpose of this section is to enable system experts to use cases

Refine to the level that can be used to formulate interfaces, special functions, data and service model interactions. However, experts such as security or EMC also

Be able to use the described use cases, terminology and requirements.

The original purpose of this part is to establish a consistent framework within the IEC to help IEC members provide use cases in a consistent manner. This section will

As the basis of the use case library to collect, manage, maintain and evaluate use cases.

In IEC, the use case library should be used as a common collaboration platform to refine use cases and coordinate different use cases to provide widely accepted common use cases.

As a basis for further standardization work.

The use case template defined in this section is not only used for the development of standards, but also as an effective way to implement projects in the field of complex systems.

Means, this is also the original intention of the original IEC PAS62559.2008 (see IEC 62559-4). In addition, structured requirements development and

Other applications with formal functional descriptions can also use these recommended templates.

The use case method should be regarded as a process that starts with defining business ideas, goals and requirements, and further refines in the use case description. These letters

Information can provide a basis for identifying/connecting to reference architectures used to describe component types and further analyze future standards.

The use case template will be further developed in the future. Development is mainly related to information, which is used to describe use cases to support further analysis.

Can be mapped to other information (for example, to reference architectures, IT security methods, standards, and data models). To a certain extent, the recommendations in this section

The template takes the above into consideration. More relationships will be considered in the development of the use case template, and will be further considered in the development of the IEC use case library.

Consider the issue.

Use Case Method Part 2. Use Case Template,

Definition of participant list and demand list