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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17173.1-2015

Replacing GB/T 17173.1-1997

**Information technology -- Open systems interconnection --
Distributed transaction processing -- Part 1: OSI TP model**

信息技术 开放系统互连 分布式事务处理 第1部分：OSI TP模型

(English Translation)

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Foreword

GB/T 17173 "Information technology - Open Systems Interconnection - Distributed Transaction Processing" currently consists of the following three parts.

--- The first part 1. OSITP model;

Part --- Article 2. OSITP services;

--- Part 3. Protocol specification.

This section GB/T 17173 Part 1.

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

This Part replaces GB/T 17173.1-1997 "Information technology - Open Systems Interconnection - Distributed Transaction Processing - Part 1. OSI TP Model. " Section compared with the GB/T 17173.1-1997, major changes in the following.

- a) update the content 3.2,8.6.1,8.7.2,8.7.3,8.7.4 and Appendix A;
- b) increase the content 7.3,7.11,8.2.4,8.6.2,8.6.3,8.6.4 and Appendix D of.

This section uses the translation method identical with the international standard ISO/IEC 10026-1:1998 "Information technology - Open Systems Interconnection - Distributed Transaction Processing - Part 1. OSITP model. " this part of the National Information Technology Standardization Technical Committee (SAC/TC28) and focal points.

This section drafted by. China Electronics Standardization Institute.

Introduction

GB/T 17173 series of standards is one of the computer systems in order to facilitate the interconnection and worked out. In accordance with this standard open systems interconnection Networking standards associated with the reference model (GB/T 9387.1-1998) specified. The scope of the reference model is divided into a series of interconnection standards There layer specifically described, each size is manageable.

OSI's goal is to allow the use of other than the interconnect standard minimum of technical agreement, to achieve interconnection of the following computer system.

- a) from different manufacturers;
- b) under different management mechanisms;
- c) the use of different levels of complexity;
- d) different technologies.

GB/T 17173 defines OSITP model, OSITP service, and has been specified in the application layer of the OSI reference model OSI available TP protocol.

OSITP service application layer services. It involves contact information for the transaction can be identified, then the transaction may involve two or more open Release system.

GB/T 17173 provides enough functionality to support transaction processing, and establishes a framework to coordinate all the various open systems Many OSITP resources.

GB/T 17173 in this section describes the concepts and mechanisms defined in this standard, the definition of a transaction processing model and the need to meet Requirements OSITP services.

GB/T 17173 Description neither the interface between the local resources, nor the local system application programming interface is specified. Do not Over the future standard expansion might solve these problems.

Information technology - OSI Distributed Transaction Processing Part 1. OSITP model

1 Scope

GB/T 17173 in this section.

- a) the concept and mechanism of GB/T 17173 defined given fact sheets;
- b) defines a transaction model;
- c) defines OSITP service requirements to be met;
- d) consideration of applications and services with other elements such as RDA (Remote Database Access), ROSE (Remote Operations Service Element) and non ROSE applications co-existing needs.

This section allows the transaction to the communication services and protocols will be explained, and they meet ISO/IEC 9804:1997 defined Atomicity, consistency, isolation, and durability (ACID properties).

This section does not explain the specific implementation of individual products and not to limit or computer system interface entity within.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 9387.1-1998 Information technology - Open Systems Interconnection - Basic Reference Model - Part 1. Basic model (idt ISO/IEC 7498-1:1994) GB/T 9387.2-1995 Information processing systems - Open Systems Interconnection - Basic Reference Model - Part 2. Security Architecture (Idt ISO 7498-2. 1989) GB/T 9387.3-2008 Information technology - Open Systems Interconnection - Basic Reference Model - Part 3. Naming and addressing (ISO/IEC 7498-3:1997, IDT) GB/T 15128-2008 Information technology - Open Systems Interconnection - Session service definition (ISO/IEC 8326:1996, IDT) GB/T 16264.2-2008 Information technology - OSI Directory - Part 2. Model (ISO/IEC 9594-2. 2005, IDT)

GB/T 17173.2-2015 Information technology - Open Systems Interconnection - Distributed Transaction Processing - Part 2. OSITP Service (ISO/IEC 10026-2:1998, IDT) GB/T 17173.3-2014 Information technology - Open Systems Interconnection - Distributed

Transaction Processing - Part 3. Protocol specification (ISO/IEC 10026-3:1998, IDT) GB/T 17176-1997 Information technology - OSI Application Layer Structure (idt ISO/IEC 9545:1994) GB/T 17967-2000 Information technology - Open Systems Interconnection - Basic Reference Model. OSI service definition conventions (idt ISO/IEC 10731:1994) ISO/IEC 9804:1997 Information technology - OSI Commitment, Concurrency and Recovery service element defined service (Information technology-Open systems interconnection-Service definition for the commitment, concurrency and recovery service element)