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(OSI) — Traitement transactionnel réparti —*

Partie 3: Spécification du protocole



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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other International organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 10026-3 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 21, *Open Systems Interconnection, data management and Open Distributed Processing*.

This second edition cancels and replaces the first edition (ISO/IEC 10026-3:1992), which has been technically revised.

ISO/IEC 10026 consists of the following parts, under the general title *Information technology – Open Systems Interconnection – Distributed Transaction Processing*:

- *Part 1: OSI TP Model*
- *Part 2: OSI TP Service*
- *Part 3: Protocol specification*
- *Part 4: Protocol Implementation Conformance Statement (PICS) proforma*
- *Part 5: Application context proforma and guidelines when using OSI TP*
- *Part 6: Unstructured Data Transfer*
- *Part 7: Message queuing*

Annexes A and B form an integral part of this part of ISO/IEC 10026. Annexes C to I are for information only.

Introduction

ISO/IEC 10026, Distributed Transaction Processing (OSI TP), is one of a set of standards produced to facilitate the interconnection of computer systems. It is related to other International Standards in the set as defined by the Reference Model for Open Systems Interconnection (ISO 7498). The Reference Model subdivides the area of standardization for interconnection into a series of layers of specification, each of manageable size.

The aim of Open Systems Interconnection (OSI) is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of computer systems:

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

ISO/IEC 10026 defines an OSI TP Model, an OSI TP Service and specifies an OSI TP Protocol available within the Application Layer of the OSI Reference Model.

The OSI TP Service is an Application Layer service. It is concerned with identifiable information which can be related as transactions, which may involve two or more Open Systems.

ISO/IEC 10026 provides sufficient facilities to support transaction processing, and establishes a framework for coordination across multiple TP resources in separate open systems.

ISO/IEC 10026 does not specify the interface to local resources, nor does it specify an application programming interface within the local system.

Information technology - Open Systems Interconnection - Distributed Transaction Processing -

Part 3: Protocol specification

1 Scope

This part of ISO/IEC 10026 provides

- a) a statement (clauses 6 to 11) of the nature of the automaton giving the necessary behaviour of each of the participating entities which are providing the OSI TP Service, covering
 - 1) the actions to be taken on receiving request and response primitives issued by a TP Service user invocation;
 - 2) the actions to be taken on receiving indication and confirm primitives issued by the presentation service-provider;
 - 3) the actions to be taken as a result of certain events within the local system;
 - 4) the actions to be taken as a result of interactions with other ASEs;
- b) the definition (clause 12) of the abstract syntax required to convey the TP protocol control information;
- c) the conformance requirements to be met by implementations of this protocol (clause 13).

The scope of this part of ISO/IEC 10026 is limited to the interconnection of systems; it does not specify or restrict the implementation of possible interfaces within a computer system.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 10026. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 10026 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ITU-T Recommendation X.200 (1994) | ISO/IEC 7498-1:1994, *Information technology - Open Systems Interconnection - Basic Reference Model: The Basic Model.*

ISO 7498-2:1989, *Information processing systems - Open Systems Interconnection - Basic Reference Model - Part 2: Security Architecture.*

ISO 7498-3:1989, *Information processing systems - Open Systems Interconnection - Basic Reference Model - Part 3: Naming and addressing.*

ITU-T Recommendation X.215 (1995) | ISO/IEC 8326:1996, *Information technology - Open Systems Interconnection - Session service definition.*

ITU-T Recommendation X.225 (1995) | ISO/IEC 8327-1:1996, *Information technology - Open Systems Interconnection - Connection-oriented Session protocol : Protocol specification.*

ITU-T Recommendation X.217 (1995) | ISO/IEC 8649:1996, *Information technology - Open Systems Interconnection - Service definition for the Association Control Service Element.*

ITU-T Recommendation X.227 (1995) | ISO/IEC 8650-1:1996, *Information technology - Open Systems Interconnection - Connection-oriented protocol for the Association Control Service Element: Protocol specification.*

ITU-T Recommendation X.216 (1994) | ISO/IEC 8822:1994, *Information technology - Open Systems Interconnection - Presentation service definition.*

ITU-T Recommendation X.226 (1994) | ISO/IEC 8823-1:1994, *Information technology - Open Systems Interconnection - Connection-oriented presentation protocol : Protocol specification.*

ISO/IEC 8824:1990, *Information technology - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1).*

ISO/IEC 8825:1990, *Information technology - Open Systems Interconnection - Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1).*

ISO/IEC 9072-1:1989, *Information processing systems - Text communication - Remote Operations - Part 1: Model, notation and service definition.*

ISO/IEC 9072-2:1989, *Information processing systems - Text communication - Remote Operations - Part 2: Protocol specification.*

ITU-T Recommendation X.207 (1993) | ISO/IEC 9545:1994, *Information technology - Open Systems Interconnection - Application Layer structure.*

ISO/IEC 9579-1:1993, *Information technology - Open Systems Interconnection - Remote Database Access - Part 1: Generic Model, Service and Protocol.*

ISO/IEC 9579-2:1993, *Information technology - Open Systems Interconnection - Remote Database Access - Part 2: SQL specialization.*

ITU-T Recommendation X.501 (1993) | ISO/IEC 9594-2:1995, *Information technology - Open Systems Interconnection - The Directory: Models.*

ITU-T Recommendation X.520 (1993) | ISO/IEC 9594-6:1995, *Information technology - Open Systems Interconnection - The Directory: Selected attribute types.*

ISO/IEC 9646-1:1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts.*

ITU-T Recommendation X.851 (1993) | ISO/IEC 9804:1994, *Information technology - Open Systems Interconnection - Service definition for the Commitment, Concurrency and Recovery service element.*

ITU-T Recommendation X.852 (1993) | ISO/IEC 9805-1:1994, *Information technology - Open Systems Interconnection - Protocol for the Commitment, Concurrency and Recovery service element : Protocol specification.*

ITU-T Recommendation X.210 (1993) | ISO/IEC 10731:1994, *Information technology - Open Systems Interconnection - Basic Reference Model - Conventions for the definition of OSI services.*

Withdrawing